# VOLUME 7 1986

## SUBJECT INDEX


Acetylcholine, 425
  ACTH
  in vitro
  muscarinic receptors
  QNB binding
Acetylcholine release, 289
  bradykinin
  guinea pigs
  myenteric plexus
  prostaglandin
N-Acetyltransferase activity, 1001
  adrenergic transmission
  delta sleep-inducing peptide
  in vitro
  in vivo
  pineal
Acidic lipids, 1121
  bradykinin
  mixed micelles of lipids and nonionic surfactant
  peptide-amphiphile interactions
  sodium dodecyl sulfate
Acinar cells, s245
  exocrine pancreatic secretion
  in vivo
  rat hypothalamic growth hormone releasing factor
ACTH
  acetylcholine, 425
  grooming, 1
  in vitro, 425
  melanotropins, 1
  muscarinic receptors, 425
  pigment dispersion, 1
  QNB binding, 425
  structure activity, 1
ACTH-(1–24), 843
  anorexia
  eating
  α-MSH
  opioids
ACTH-(4–9), 563
  analog ORG 2766
  circadian rhythm disruption
  desglycinamide$^{9}$-(Arg$^{8}$)-vasopressin
  passive avoidance
  retrograde amnesia
Adenohypophysis, s175
  cerebral cortex
  cyclic AMP
  glycogenolysis
  human growth hormone releasing factor
  peptide comparisons
  peptide histidine isoleucine
  secretion
  vasoactive intestinal peptide
Adenylate cyclase
  glucagon analogs, s109
  glucagon stimulations, 645
  GRF analogs, s53
  heart, s109
  helodermin, natural, s79
  helodermin, synthetic, s79
  liver, s79, s109
  peptide comparisons, s165
  portacaval anastomosis, 645
  secretin concentrations, 645
  somatocrinin, s165
  vasoactive intestinal peptide, s53
  VIP receptors, s79
Adenylate cyclase activity, 865
  kidneys, rats
  renal effects
  secretin receptors
Adenylate cyclase regulation, 849
  HT29 cells
  peptide receptor antagonists
  vasoactive intestinal peptide
Adrenal gland, 873
  atrial natriuretic peptide binding sites
  tree shrews
Adrenergic transmission
  delta sleep-inducing peptide, 1001, 1165
  extra-sleep effects, 1165
  in vitro, 1001
  in vivo, 1001
  N-acetyltransferase activity, 1001
  natural occurrence, 1165
  physiological functions, 1165
  pineal, 1001
  sleep, 1165
  therapeutic potential, 1165
Adrenocorticotrophic hormone
  anterior ventral third ventricle site, 651
  β-endorphin, 597
  grooming behavior, 651
  hypothalamus, 591
  high pressure liquid chromatography, 591
  naloxone blockade, 597
  pressor responses, 597
  pulsatile secretion, 219
  ultradian rhythm, 219
Adrenocorticotropic hormone, 1153
  corticotropin releasing factor
  cyclic AMP
  in vivo
  pituitary
  stress
Adrenocorticotropin-immunoreactive neurons, 801
  cat forebrain
  lesions, electrolytic
Aggression, 1007
  defeat-induced analgesia
  prolyl-leucyl-glycinamide (MIP-1)
  tyrosine-prolyl-leucyl-glycinamide
Alcohol, 907
  cardiovascular responses
  dependence
  drinking
  eating
  endogenous opiates, review
  immune system
  learning
  locomotor activity
  memory
  mental illness
  respiration
  seizures
  sex differences
  social behavior
  stress
  stroke
  thermoregulation
  tolerance
Alcoholic/non-alcoholic comparisons, 1193
  cerebrospinal fluid
  human studies
  human pancreatic polypeptide immunoreactivity
  motilin
Alligator/lizard/skink comparisons, 1101
  brains, reptile
  gonadotropin-releasing hormone
  molecular form identification
Alpha-adrenergic systems, 775
  dopaminergic mechanisms
  drug interaction
  β-endorphin levels
  estrogen
  ovariectomy
Amino acid sequences
  animal models, s17
  dog/goat comparisons, 689
  micropurification techniques, 689
  progastrin, 689
  purification, s17
  vasoactive intestinal peptide, s17
D-Amino acids, 195
  binding studies
  β-casomorphin analogs
  opiate receptors
[$^{14}$C]-Aminopyrine uptake, 885
  $H^+$-production
  isolated parietal cells
  opioid peptides
Amino-terminal fragment of POMC, 615
  intermediate lobe of pituitary
  peptide biosynthesis
  proopiomelanocortin
  reversed phase HPLC
Amnesia
  cholecystokinin octapeptide, 105
  cholecystokinin tetrapeptide amides, 809
  passive avoidance, 105, 809
Amphibian brain, 827
  chicken GnRH II
  GnRH structure
  vertebrate brain GnRH


---

Numbers preceded by the letter "s" indicate items appearing in *VIP and Related Substances . . .* Suppl., Vol. 7, 1986.

Amygdaloid, 341
dorsal vagal complex
hypothalamus
neuropeptide Y
Analgesia
arginine vasopressin, 111
Met-enkephalin content, 39
5-hydroxytryptophan synthetic peptide, 995
jump thresholds, 995
lesions, paraventricular nucleus, 111
Lys-Trp, 39
neuropeptides, 1095
pain, 995
pain inhibition, 111
periaqueductal gray, 39
rabbits, 1095
stress, pain induced, 1095
systemic administration, 995
tail-flick test, 995
tolerance, 995
Analog ORG 2766, 563
ACTH(4–9)
circadian rhythm disruption
desglycinamide$^{9}$-(Arg$^{8}$)-vasopressin
passive avoidance
retrograde amnesia
Angiotensin II
atrial natriuretic factor, 373
autoradiography, 679
binding site distribution, 679
blood-brain barrier, 679
blood pressure, 373
drinking, 373
octadecyl cartridges, 365
radioimmunoassay, 365
strain differences, 373
Angiotensin II receptors, 1021
[$^{125}$I]-angiotensin II
blood pressure regulation
quantitative autoradiography
spontaneously hypertensive rats
[$^{125}$I]-Angiotensin II receptors, 1021
angiotensin II receptors
blood pressure regulation
quantitative autoradiography
spontaneously hypertensive rats
Anglerfish islets
aPY, 147
glucagon biosynthesis, 331
NPY immunoreactive nerves, 147
post-translational processing, 331
preproglucagon, 331
Animal models
amino acid sequences, s17
endothelium, s225
pulmonary artery, s225
purification, s17
vascular relaxation, s225
vasoactive intestinal polypeptide, s17, s225
Anorexia, 843
ACTH-(1–24)
eating
α-MSH
opioids
Anterior pituitary function, 51
galanin
growth hormone
hypothalamus
median eminence
Anterior pituitary gland, 45
epidermal growth factor
in vivo
Anterior pituitary lobe, 603
corticotropin releasing factor
beta-endorphin
beta-lipotropin
stress
Anterior ventral third ventricle site, 651
adrenocorticotrophic hormone
grooming behavior
Antidiuretic activity, 91
dogs
renin secretion
vasopressin
Antinociception
binding site distribution, 315
eel calcitonin, 315
Met-enkephalins, 419
substance P, 419
tachykinins, 419
Apparatus
Beckman model 5500 gamma-spectrometer, s151
Fleisch pneumotachograph, 207
strain-gauge transducers, 73
Aprotinin, 369
bacitracin
β-endorphin
Met-enkephalin
inhibitory effect
spinal release
aPY, 147
anglerfish islets
NPY immunoreactive nerves
Arcuate nucleus, 1197
endorphinic neurons
hypothalamus
neuronal contact
proopiomelanocortin
tuberoinfundibular dopaminergic neurons
Arginine modification, 1131
bovine parathyroid hormone peptide
conformational changes
hydrophobicity
hypotensive response
methionine oxidation
vascular activity
Arginine-vasopressin
analgesia, 111
atrial natriuretic factor, 989
blood pressure, 989
dehydration, 989
drug interaction, 569
dynorphin, 267
β-endorphin, 267
hypertension, 569
intraventricular administration, 541
lesions, paraventricular nucleus, 111
osmotic stimuli, 989
pain inhibition, 111
preovulatory prolactin surge, 541
rat ovaries, 267
strain differences, 267
sympathoadrenal system, 569
tachycardia, 569
$^{3}$H-Arginine$^{8}$-vasopressin receptors, 701
binding sites
strain differences
up-regulation
Asthma, s279
bronchodilation
human studies
vasoactive intestinal peptide
Atria levels, 33
heart failure
alpha-human atrial natriuretic peptide
hypertension
plasma levels
Atrial natriuretic factor
angiotensin II, 373
arginine vasopressin, 989
atrium, 573
blood pressure, 373, 989
cleavage site, 407
cold iodinated peptides, 241
dehydration, 989
drinking, 373
endogenous protease, 407
frogs, 573
gel filtration, 573
gene expression, 1147
heart ventricular tissue, 1147
immunocytochemistry, 573
*in situ* hybridization, 1147
in vivo half-life, 241
localization and characterization, 573
osmotic stimuli, 989
strain differences, 373
Atrial natriuretic peptide binding sites, 873
adrenal gland
tree shrews
Atrium, 573
atrial natriuretic factor
frogs
gel filtration
immunocytochemistry
localization and characterization
Attention, 189
electrophysiological signs
human studies, twins
vasopressin
Autoradiographic distribution, 1029
central nervous system
$^{125}$I-galanin binding sites
Autoradiographic localization
binding sites, 55
guinea pig brain, 855
in vitro, 283
neuropeptide Y receptors, 55
pharmacological characterization, 855
species differences, 855
substance P receptors, 855
VIP receptors, 283
Autoradiography, 679
angiotensin II
binding site distribution
blood-brain barrier
Avoidance, 11
discrimination learning
memory process
β-(Tyr$^{9}$)MSH$_{9-18}$
shock induced amnesia


Numbers preceded by the letter "s" indicate items appearing in *VIP and Related Substances . . .* Suppl., Vol. 7, 1986.

Baboons, 771
cholecystokinin octapeptide
somatostatin levels
somatostatin-like immunoreactivity
Bacitracin, 369
aprotinin
β-endorphin
Met-enkephalin
inhibitory effect
spinal release
Bag cell homogenates, 637
cleavage
mollusks
neuropeptide processing activity
Barbiturates, 259
dogs
GABA complex modulation
hemodynamic responses
intravenous administration
methionine-enkephalin
Behavioral alterations, 557
bombesin
nociceptive mechanisms
substance P
Binding site distribution
angiotensin II, 679
antinociceptive activity, 315
autoradiography, 679
blood-brain barrier, 679
eel calcitonin, 315
Binding sites
$^{3}$H-arginine$^{8}$-vasopressin receptors, 701
autoradiographic localization, 55
calcium ions, 953
cerebral cortex, s181
human colonic adenocarcinoma cells, s137
human sweat glands, isolated, s151
monoclonal antibodies, s137
neuropeptide Y receptors, 55
pancreatic ancini, 953
receptor mediated endocytosis, s137
somatostatin receptors, 953
strain differences, 701
structure-binding relationship, s181
sweat secretion regulation, s151
up-regulation, 701
vasoactive intestinal peptide, s137, s151, s181
Binding studies, 195
D-amino acids
β-casomorphin analogs
opiate receptors
Bioactivity, 723
cholecystokinin octapeptide
cholecystokinin-33
pancreas
Biochemical characterization, 815
immunoreactivity
localization in synaptosomes
mechanisms of release
neuromedin B-like peptides
Biological activity, 1015
peptidase susceptibility
proteolysis
purification and characterization
thymopentin
thymopentin analogs
Biological gastric inhibitory polypeptide activity, s75
gastric inhibitory polypeptide receptor
insulin release
Biological significance, s37
enteroglucagon
gastric acid secretion
tissue specificity
Biosynthesis
crustacean hyperglycemic hormone, 397
frogs, 163
pars intermedia, 163
peptide processing, 163
proopiomelanocortin, 163
tunicamycin, 163
X-organ sinus gland, 397
Blood-brain barrier, 679
angiotensin II
autoradiography
binding site distribution
Blood flow
cerebral cortex, s169
dogs, s237
energy metabolism, s169
helodermin, s237
intercellular communication, s169
neuronal activity, s169
structure-function relationship, s237
vasoactive intestinal peptide, s169
vasoactive intestinal polypeptide-like effect, s237
Blood levels, s221
dogs
dopaminomimetics
vasoactive intestinal polypeptide
Blood pressure
angiotensin II, 373
arginine vasopressin, 989
atrial natriuretic factor, 373, 989
calcitonin gene-related peptide, 337
central amygdaloid nucleus, 337
dehydration, 989
drinking, 373
endogenous opioids, 977
α-neo-endorphin, 977
β-neo-endorphin, 977
heart rate, 337, 977
naltrexone, 977
osmotic stimuli, 989
spontaneously hypertensive rats, 977
strain differences, 373
Blood pressure effects, 539
lysine-8-vasopressin
route of administration
Blood pressure regulation, 1021
[$^{125}$I]-angiotensin II
angiotensin II receptors
quantitative autoradiography
spontaneously hypertensive rats
Body fluid regulation, 141
α-human atrial natriuretic polypeptide
human plasma
Body weight, 1079
bombesin
calcitonin
cholecystokinin octapeptide
food intake
glucagon
hamsters
photoperiod/peptide interactions
Body weight regulation, 61
fa gene
hyperinsulinemia
insulin binding
Bombesin
behavioral alterations, 557
body weight, 1079
calcitonin, 729, 969, 1079
cholecystokinin, 729, 969, 1079
eating, 969
food intake, 729, 1079
glucagon, 969, 1079
hamsters, 1079
hyperglycemia, 969
hyperinsulinemia, 969
lactation, 835
nociception, 835
peripheral administration, 969
photoperiod/peptide interactions, 1079
substance K, 835
substance P, 557, 835
wolves, 969
Bombesin-like immunoreactivity, 127
gastrin release
growth hormone-releasing factor
peptide histidine isoleucine
peptidergic neurotransmitter
somatostatin release
vasoactive intestinal peptide
Bovine parathyroid hormone peptide, 1131
arginine modification
conformational changes
hydrophobicity
hypotensive response
methionine oxidation
vascular activity
Bradycardia, 695
gastric acid secretion
hypothalamic paraventricular nucleus
oxytocin agonist
dET$^{2}$-Tyr(ET)Orn$^{8}$ vasotocin
Bradykinin
acetylcholine release, 289
acidic lipids, 1121
guinea pigs, 289
mixed micelles of lipids and nonionic surfactant, 1121
myenteric plexus, 289
peptide-amphiphile interactions, 1121
prostaglandin, 289
sodium dodecyl sulfate, 1121
Brain
amygdala, 315, 341
amygdala central nucleus, 855
amygdaloid complex, 1029
amygdaloid nuclei, 609
anterior hypothalamic nucleus, 1029
anterior nuclei of the olfactory bulb, 1029
anterior pituitary, 253, 277, 603
anterior thalamic nuclei, 877
arcuate nucleus, 749, 783, 801, 1197
area postrema, 55, 679
basal ganglia, 973
bed nuclei of the stria terminalis, 609, 877


Numbers preceded by the letter "s" indicate items appearing in *VIP and Related Substances . . .* Suppl., Vol. 7, 1986.

brainstem, 315, 973, 1109
caudal part of the spinal nucleus of the trigeminal nerve, 1043
caudal spinal trigeminal nucleus, 1029
caudate nucleus, 97
caudate putamen, 609, 669, 1043
central amygdaloid nucleus, 337, 1043
central gray, 609
cerebellum, 293, 815
cerebral cortex, 61, 97, s169, s175, s181, 293
cisterna magna, 207, 539
corpus striatum, 877
cortex, 55, 815, 855, 973
diencephalon, 315, 877
dorsal bed nucleus of the stria terminalis, 1029
dorsal central gray, 1029
dorsal infundibular nucleus, 941
dorsal motor nucleus of the vagus, 695, 1021
dorsal parabrachial reticular nucleus, 1029
dorsal parvocellular reticular nucleus, 1029
dorsal premamillary nucleus, 1029
dorsal septum, 1029
dorsal vagal complex, 341
entopeduncular nucleus, 1043
entorhinal cortex, 1029
fasciculus longitudinalis medialis, 315
fasciculus medialis prosencephali, 315
forebrain, 207, 801
Forel's field $H_1$ and $H_2$, 1029
globus pallidus, 609, 669
habenular nuclei, 1043
hindbrain, 207
hippocampus, 609, 815, 855
hypothalamic paraventricular nucleus, 695
hypothalamus, 51, 61, 79, 225, 277, 315, 341, 591, 609, 775, 783, 801, 815, 877, 891, 973, 1011, 1043, 1137, 1189, 1197
insular cortex, 1029
intermediate pituitary, 253, 615
internal medullary laminae of the thalamus, 1029
interpeduncular nucleus, 1029, 1043
locus coeruleus, 1021
lateral dorsal tegmental nucleus, 1043
lateral septum, 55, 877
lateral ventricle, 809, 977
lemniscus medialis, 315
locus coeruleus, 609
medial amygdaloid nucleus, 1043
medial forebrain bundle, 1029
medial gray striata of the superior colliculus, 1029
medial habenular nucleus, 1043
medial pretectal nucleus, 1029
medial septal nuclei, 877
median eminence, 51, 651, 749, 941, 1011
medulla, 783
midbrain, 815
nervus terminalis, 899
neurohypophysis, 941
neurointermediate pituitary, 277, 609, 749
nuclei suprachiasmatis, 679
nucleus accumbens septi, 609, 711, 877, 1029
nucleus of the diagonal tract, 609
nucleus of the medial optic tract, 1029
nucleus olfactorius lateralis, 679
nucleus raphe pallidus, 1043
nucleus tractus solitarius, 609, 679, 783, 1021, 1043
nucleus triangularis septi, 679
olfactory bulb, 61, 815, 855
organon subfornicalis, 679
organum vasculosum laminae terminalis, 651, 679, 1021
paraventricularis, 679
paraventricular nucleus, 111, 749, 801, 891, 1189
pars intermedia, 163
periamygdala, 1029
periaqueductal gray, 39, 419
peripeduncular area, 1029
periventricular gray matter, 315, 1029
periventricularis, 679
pineal gland, s193
piriform cortex, 1029
pituitary, 119, 815, 915, 941, 1137, 1153
pituitary, anterior, 775
pituitary, intermediate lobe, 775
pons medulla, 815
prefrontal cortex, 1029
preoptic nucleus, 941
raphe nuclei, 315
septo-limbic area, 801
septum, 609, 701, 877
spinal trigeminal tract, 1029
striatum, 21, s187, 815, 855, 983
subfornical organ, 1021
subiculum, 1029
substantia gelatinosa, 609, 1029
substantia innominata, 877
substantia nigra, 855, 983
substantia nigra pars reticulata, 1043
substantia nigra zona compacta, 1029
subzona incerta, 1029
superficial gray strata of the superior colliculus, 1029
superior colliculus, 609, 855
suprachiasmatic area, 183
suprachiasmatic nucleus, 749
supraoptic nucleus, 1021
telencephalon, 79
thalamic nuclei, 855
thalamus, 815, 973
ventral hippocampus, 55
ventral pallidum, 1029, 1043
ventral parabrachial reticular nucleus, 1029
ventral parvocellular reticular nucleus, 1029
ventral tegmental area, 1029
ventral thalamus, 941
ventromedial hypothalamus, 473
ventromedial nucleus of the hypothalamus, 1029, 1043
Brain, frogs, 941
MCH-like immunoreactivity
melanin-concentrating hormone
peptide distribution
Brain, gerbil, 973
carotid ligation
cerebral ischemia
cholecystokinin octapeptide
immunoreactivity
Brain, reptile, 1101
alligator/lizard/skink comparisons
gonadotropin-releasing hormone
molecular form identification
Bronchodilation, s279
asthma
human studies
vasoactive intestinal peptide

Calcitonin
body weight, 1079
bombesin, 729, 969, 1079
cholecystokinin octapeptide, 729, 969, 1079
food intake, 729, 969, 1079
glucagon, 969, 1079
hamsters, 1079
hyperglycemia, 969
hyperinsulinemia, 969
lactation, 1079
peripheral administration, 969
photoperiod/peptide interactions, 1079
wolves, 969
Calcitonin gene-related peptide, 337
blood pressure
central amgydaloid nucleus
heart rate
α-Calcitonin-gene-related peptides, 231
coronary vasodilators
sodium nitroprusside
species differences
Calcium, 443
corticotropin releasing factor
CRF induced ACTH release
Calcium ions, 953
binding sites
pancreatic ancini
somatostatin receptors
cAMP accumulation, 935
cAMP potentiation
corticotropin releasing factor
pituitary
protein kinase C stimulation
cAMP generation, s155
gastric acid secretion
receptor activity
secretin
structure-activity relationship
cAMP potentiation, 935
cAMP accumulation
corticotropin releasing factor
pituitary
protein kinase C stimulation
Capsaicin, 587
cholecystokinin
locomotor activity
vagotomy
Cardiovascular responses
alcohol, 907
dependence, 907

Numbers preceded by the letter "s" indicate items appearing in *VIP and Related Substances . . .* Suppl., Vol. 7, 1986.

dose-dependent effects, 1087
drinking, 907
eating, 907
endogenous opiates, review, 907
epicardial application, 1087
guinea pigs, 1087
immune system, 907
learning, 907
locomotor activity, 907
memory, 907
mental illness, 907
neurotensin, 1087
respiration, 907
seizures, 907
sex differences, 907
social behavior, 907
stress, 907
stroke, 907
tachycardia, 1087
thermoregulation, 907
tolerance, 907
Carotid body, 767
enkephalin
physiological chemoreceptor stimulus
rabbits
substance P
Carotid ligation, 973
brain, gerbil
cerebral ischemia
cholecystokinin octapeptide
immunoreactivity
β-Casomorphin analogs, 195
D-amino acids
binding sites
opiate receptors
Catabolism
dynorphin, 225
human colonic HT29 cell line, 1071
hypothalamus, 225
neuroblastoma clone N1E115, 1071
neurotensin, 225
neurotensin inactivation, 1071
peptidase inhibitors, 225
Catecholamine secretion, 413
fetal adrenal gland
fetal twins
sheep
VIP distribution
Cat forebrain, 801
adrenocorticotropin-immunoreactive neurons
lesions, electrolytic
Cat/rat comparisons, s250
peptide-containing pathway
peptide histidine isoleucine
sacral spinal cord
urinary bladder
vasoactive intestinal polypeptide
Cats
central nervous system, 207
myometrium, s201
respiratory stimulation, 207
smooth muscle relaxation, s201
thyrotropin-releasing hormone, 207
vasoactive intestinal polypeptide, s201
CCK-8 stimulation, 473
desensitization
in vitro
non-sulfated CCK-8
sulfated CCK-8
ventromedial hypothalamus
Central amygdaloid nucleus, 337
blood pressure
calcitonin gene-related peptide
heart rate
Central nervous system
autoradiographic distribution, 1029
cats, 207
chromatographic studies, 297
corticotropin-releasing factor, 79
fish, 79
$^{125}$I-galanin binding sites, 1029
immunohistochemistry, 297
immunoreactivity, 79, 1043
lampreys, 297
neuropeptide K, 1043
neuropeptides, 1109
peptide cross-listing and review, 497
peptide effects and actions, 497
peptide receptors, 1109
respiratory stimulation, 207
tachykinin, 1043, 1109
tachykinin-like peptides, 297
thyrotropin-releasing hormone, 207
urotensin I, 79
Cerebellum, 293
cerebral cortex
cholecystokinin binding
receptor specificity
species differences
Cerebral cortex
adenohypophysis, s175
binding sites, s181
blood flow, s169
cerebellum, 293
cholecystokinin binding, 293
cyclic AMP, s175
energy metabolism, s169
glycogenolysis, s175
human growth hormone releasing factor, s175
intercellular communication, s169
neuronal activity, s169
peptide comparisons, s175
peptide histidine isoleucine, s175
receptor specificity, 293
secretin, s175
species differences, 293
structure-binding relationship, s181
vasoactive intestinal peptide, s169, s175, s181
Cerebral ischemia, 973
brain, gerbils
carotid ligation
cholecystokinin octapeptide
immunoreactivity
Cerebrospinal fluid
alcoholic/non-alcoholic comparisons, 1193
human pancreatic polypeptide, 1193
human studies, 455, 1193
immunoreactivity, 1193
motilin, 1193
neuropeptide Y immunoreactivity, 455
Chicken GnRH II, 827
amphibian brain
GnRH structure
vertebrate brain GnRH
3-[(3-Cholamidopropyl) dimethylammonio]-1-propane sulfonate, s147
guinea pig lung
solubilization
vasoactive intestinal peptide
Cholecystokinin
amnesia, 105
baboons, 771
bioactivity, 723
body weight, 1079
bombesin, 729, 969, 1079
brain, gerbil, 973
calcitonin, 729, 969, 1079
capsaicin, 587
carotid ligation, 973
cerebral ischemia, 973
dopamine receptors, 97
eating, 135, 969
food intake, 729, 1079
glucagon, 969, 1079
hamsters, 1079
hyperglycemia, 969
hyperinsulinemia, 969
immunoreactivity, 973
in vitro release, 97
lactation, 729
locomotor activity, 587
pancreas, 723
passive avoidance response, 105
peripheral administration, 969
photoperiod/peptide interactions, 1079
preload, 135
proglumide, 135
satiety, 135
somatostatin, 97, 771
somatostatin-like immunoreactivity, 771
striatal amino acids, 97
vagotomy, 587
wolves, 969
Cholecystokinin antagonists, 1159
CR 1409
pancreatitis, caerulein induced
pancreatitis, taurocholate induced
proglumide
protective effect
Cholecystokinin binding, 293
cerebellum
cerebral cortex
receptor specificity
species differences
Cholecystokinin tetrapeptide amides, 809
amnesia
passive avoidance
Choline acetyltransferease, 899
immunocytochemistry
nervus terminalis
substance P fibers
vasoactive intestinal polypeptide
Cholinergic muscarinic receptor binding, 21
in vitro
melanotropin release inhibiting factor
$^{3}$H-quinuclidinyl benzilate
striatum


---

Numbers preceded by the letter "s" indicate items appearing in *VIP and Related Substances . . .* Suppl., Vol. 7, 1986.

Chromatographic studies, 297
central nervous system
immunohistochemistry
lampreys
tachykinin-like peptides
Circadian rhythm disruption, 563
ACTH-(4–9)
analog ORG 2766
desglycinamide$^{9}$-(Arg$^{8}$)-vasopressin
passive avoidance
retrograde amnesia
Cleavage, 637
bag cell homogenates
mollusks
neuropeptide processing activity
Cleavage site, 407
atrial natriuretic factor
endogenous protease
Cold iodinated ANF peptides, 241
atrial natriuretic factor
in vivo half-life
Complementary GnRH, 1137
complementary GnRH antiserum
GnRH receptors
gonadotropin-releasing hormone
mRNA
rabbits
receptor recognition, antiserum
Complementary GnRH antiserum, 1137
complementary GnRH
GnRH receptors
gonadotropin-releasing hormone
mRNA
rabbits
receptor recognition, antiserum
Conformation, s69
glucagon analogues
glycogenolytic activity
structure-activity relationship
Conformational analysis, s43
glucagon
peptide analogs
secondary-tertiary structure
secretin
vasoactive intestinal peptide
Conformational changes, 1131
arginine modification
bovine parathyroid hormone peptide
hydrophobicity
hypotensive response
methionine oxidation
vascular activity
Converting activity, 87
inhibition
Leumorphin
opioids
Copper deficiency, 1061
enkephalins
insulin
pancreas
Coronary vasoconstriction, 821
neuropeptide Y
pig heart
stellate ganglia
sympathetic nerve stimulation
Coronary vasodilators, 231
α-calcitonin gene-related peptides
sodium nitroprusside
species differences
Coronary vessels, 431
guinea pig isolated heart
neurotensin
vagal nerves
Corticosteroidogenesis, 237
dynorphin
β-endorphin
opioid peptides
Corticotropin, 73
corticotropin-releasing factor
cortisol
dogs
intestinal motility
Corticotropin releasing factor
adrenocorticotropin hormone, 1153
anterior pituitary lobe, 603
calcium, 443
central nervous system, 79
corticotropin, 73
corticotropin-releasing factor induced ACTH release, 443
cortisol, 73
cyclic AMP, 1153
cyclic AMP accumulation, 935
cyclic AMP potentiation, 935
dual staining immunocytochemistry, 891
dogs, 73
β-endorphin, 603
fish, 79
immunoreactivity, 79
intestinal motility, 73
in vivo, 1153
β-lipotropin, 603
monkeys, cynomolgus, 465
paraventricular neurons, 891
pituitary, 935, 1153
protein kinase C stimulation, 935
stress, 603, 1153
urotensin I, 79
vasodilator, 465
vasopressin, 891
Cortisol, 73
corticotropin
corticotropin-releasing factor
dogs
intestinal motility
Cosecretion, 717
peptide histidine methionine
vasocactive intestinal peptide
VIP-producing tumors
CR 1409, 1159
cholecystokinin antagonists
pancreatitis, caerulein induced
pancreatitis, taurocholate induced
proglumide
protective effect
C-Reactive protein, 961
neutrophils
phagocytosis
signal sequences
synthetic peptides
tuftsin
CRF induced ACTH release, 443
calcium
corticotropin-releasing factor
Crustacean hyperglycemic hormone, 397
biosynthesis
X-organ sinus gland
Crustaceans, 67
pericardial organ
proctolen
Cryoprotectant, 155
electron microscopy
immunocytochemistry
peptide immunoreactivity
tissue morphology
Cyclic AMP
adenohypophysis, s175
adrenocorticotropic hormone, 1153
cerebral cortex, s175
corticotropin releasing factor, 1153
glycogenolysis, s175
human growth hormone releasing factor, s175
in vivo, 1153
melanoma cells, 437
peptide comparisons, s175
peptide histide isoleucine, s175
pineal gland, s193
pituitary, 1153
secretin, s175
stress, 1153
striatal neurons, s187
tyrosinase, 437
vasoactive intestinal polypeptide, s175, s187, s193
Cyclic nucleotides
in vitro, 357
respiration stimulation, 491
sea urchin eggs, 491
secretin secretion, 357
speract, 491
Cytosol, 741
neuropeptides
rabbits
renal papilla
somatostatin binding sites

Defeat-induced analgesia, 1007
aggression
prolyl-leucyl-glycinamide (MIP-1)
tyrosine-prolyl-leucyl-glycinamide (Tyr-MIF-1)
Dehydration, 989
arginine vasopressin
atrial natriuretic factor
blood pressure
osmotic stimuli
Delayed response performance, 201
locomotor activity
MSH/ACTH 4–10 administration
Delta sleep-inducing peptide
adrenergic transmission, 1001, 1165
extra-sleep effects, 1165
in vitro, 1001
in vivo, 1001
N-acetyltransferase activity, 1001
natural occurrence, 1165
physiological functions, 1165
pineal, 1001
sleep, 1165
therapeutic potential, 1165
Dependence, 907
alcohol
cardiovascular responses
drinking


---

Numbers preceded by the letter "s" indicate items appearing in *VIP and Related Substances . . .* Suppl., Vol. 7, 1986.

eating
endogenous opiates, review
immune system
learning
locomotor activity
memory
mental illness
respiration
seizures
sex differences
social behavior
stress
stroke
thermoregulation
tolerance
Depolarized slice formation, 669
lesion effects
opioid peptide release
regional distribution
Dermorphin
dermorphin-like peptides, 755
enzymic degradation, 247
guinea pig ileum, 755
high performance liquid chromatography, 247
in vitro, 247
mouse vas deferens, 755
opioid receptor binding, 755
Dermorphin-like peptides, 755
dermorphin
guinea pig ileum
mouse vas deferens
opioid receptor binding
Desensitization, 473
CCK-8 stimulation
in vitro
non-sulfated CCK-8
sulfated CCK-8
ventromedial hypothalamus
Desglycinamide$^9$-(Arg$^8$)-vasopressin, 563
ACTH-(4–9)
analog ORG 2766
circadian rhythm disruption
passive avoidance
retrograde amnesia
Design strategy, s49
growth hormone releasing factor
structure-activity relationship
synthetic analogues
Differential sensitivity, 783
immunocytochemistry
monosodium glutamate
neurotoxic effects
opiocortin
tyrosine hydroxylase
Dihydroxyalkyl bonded silica support, 481
high performance liquid chromatography
proteins
Discrete brain nuclei, 749
lesions, monosodium-L-glutamate
neonatal MSG treatment
neurotoxin effects
oxytocin
somatostatin
vasopressin
Discrimination learning, 11
avoidance
memory process
$\beta$(Tyr$^9$)MSH$_{9-18}$
shock induced amnesia
Dog duodenal mucosal explants, s229
in vitro
neurohormonal regulation
secretin secretion
Dogfish sharks, 119
$\beta$-endorphin
pituitary
postranslational processing
Dog/goat comparison, 689
amino acid sequences
micropurification techniques
progastrin
Dog/rat comparisons, s61
secretin analogues
structure-activity relationship
Dogs
antidiuretic activity, 91
barbiturates, 259
blood flow, s237
blood levels, s221
corticotropin, 73
corticotropin-releasing factor, 73
cortisol, 73
dopaminomimetics, s221
GABA complex modulation, 259
helodermin, s237
hemodynamic responses, 259
intestinal motility, 73
intravenous administration, 259
methionine-enkephalin, 259
renin secretion, 91
structure-function relationship, s237
vasoactive intestinal polypeptide, s221
vasoactive intestinal polypeptide-like effect, s237
vasopressin, 91
Dopamine receptors, 97
cholecystokinin octapeptide
in vitro release
somatostatin
striatal amino acids
Dopamine receptor stimulation, 277
Met-enkephalin-like immunoreactivity
neurointermediate pituitary
Dopaminergic mechanisms, 775
alpha-adrenergic system
drug interaction
$\beta$-endorphin levels
estrogen
ovariectomy
Dopaminomimetics, s221
blood levels
dogs
vasoactive intestinal polypeptide
Dorsal vagal complex, 341
amygdala
hypothalamus
neuropeptide Y
Dose-dependent effects, 1087
cardiovascular response
epicardial application
guinea pigs
neurotensin
tachycardia
Dose-effect relationship, s281
growth hormone
human growth hormone-releasing factor
human studies, males
route of administration
Drinking
alcohol, 907
angiotensin II, 373
atrial natriuretic factor, 373
blood pressure, 373
cardiovascular responses, 907
dependence, 907
eating, 907
endogenous opiates, review, 907
immune system, 907
learning, 907
locomotor activity, 907
memory, 907
mental illness, 907
respiration, 907
seizures, 907
sex differences, 907
social behavior, 907
strain differences, 373
stress, 907
stroke, 907
thermoregulation, 907
tolerance, 907
Drug
acetylcholine, 27, 623
adenosine, 631
d-amphetamine, s221
aprotinin, 369, 383
atrial natriuretic factor, 373
atropine, 27, 1087
bacitracin, 369
bremazocine, 843
bromocriptine, 277
calcium, 443
capsaicin, 587, 1087
captopril, 669
carbachol hydrochloride, 1087
CHAPS, s147
$\alpha$-chloralose, 259
cimetidine, 27, 431
cimetidine hydrochloride, 1087
clonidine, 775
colchicine, 801, 1043
CR 1409, 1159
diazepam, 259
dibutyryl cAMP, 885
dibutyryl cyclic adenosine monophosphate, 357
1,1-dimethyl-4-phenylpiperazinium iodide, 1087
diphenhydramine, 27, 431
ecolid, 569
EDTA, 383
gabexate, 1159
glucose, 473
guanethidine, 821
guanethidine monosulfate, 1087
5′-guanylyl-imidodiphosphate, 357
haloperidol, 775
histamine, 27, 885
histamine dihydrochloride, 1087
5-hydroxytryptamine, 27
indomethacin, 27, 431, 1087
3-isobutyl-1-methylxanthine, 357
isoproterenol, 1001


---

Numbers preceded by the letter "s" indicate items appearing in *VIP and Related Substances . . .* Suppl., Vol. 7, 1986.

lanthanum, 443
lidocaine, 1087
mannitol, 989
mepyramine bimaleate, 1087
methamphetamine, 983
methysergide, 27, 431
metoprolol, 631
monosodium glutamate, 783
morphine, 27, 449, 557, 711, 995
naloxone, 201, 237, 259, 597, 711, 745, 885, 1007
naltrexone, 977
nifedipine, 443
noradrenaline, 27
noradrenaline hydrochloride, 1087
ouabain, 631
penfluridol, 443
pentazocine, 843
pentobarbital, 259
pentolinium tartrate, 1087
pergolide mesylate, s221
$PGE_2$, 1159
phenoxybenzamine, 569, 821
phentolamine hydrochloride, 1087
phenylephrine, 1001
picrotoxin, 259
pimozide, 443
PMSF, 383
3PPP, s221
prazocin, 27
proglumide, 105, 135, 1159
propranolol, 27, 431
propranolol hydrochloride, 1087
reserpine, 569
salbutamol, s279
SCH 23390, s221
SK&F 38393, s221
(±)SKF-10,047, 449
sodium taurocholate, 1159
spratropium bromide, s279
tetrodotoxin, s201, 631, 1087
tifluadom, 843
trifluoperazine, 443
tunicamycin, 163
U50,488H, 449
verapamil, 27, 631
yohimbine, 27

Drug interaction
alpha-adrenergic system, 775
arginine vasopressin, 569
dopaminergic mechanisms, 775
β-endorphin levels, 775
estrogen, 775
human calcitonin gene-related peptide, 631
hypertension, 569
inotropic action, 631
in vitro, 631
ovariectomy, 775
sympathoadrenal system, 569
tachycardia, 569

Dual staining immunocytochemistry, 891
corticotropin-releasing factor
paraventricular neurons
vasopressin

Duodenum, 389
dynorphin-A(1–8)
α-neo-endorphin
intramural perikarya

Dynorphin
arginine-vasopressin, 267
catabolism, 225
corticosteroidogenesis, 237
β-endorphin, 237, 267
hypothalamus, 225
neurotensin, 225
opioid peptides, 237
peptidase inhibitors, 225
rat ovaries, 267
strain differences, 267

Dynorphin-A(1–8), 389
duodenum
α-neo-endorphin
intramural perikarya

Eating
ACTH-(1–24), 843
alcohol, 907
anorexia, 843
baboons, 771
bombesin, 969
calcitonin, 969
cardiovascular responses, 907
cholecystokinin octapeptide, 135, 771, 969
dependence, 907
drinking, 907
endogenous opiates, review, 907
glucagon, 969
human plasma, 15
hyperglycemia, 969
hyperinsulinemia, 969
immune system, 907
learning, 907
locomotor activity, 907
memory, 907
mental illness, 907
metabolism, 15
α-MSH, 843
neurotensin-like immunoreactivity, 15
opioids, 745, 843
peripheral administration, 969
preload, 135
proglumide, 135
rabbits, 745
respiration, 907
satiety, 135
seizures, 907
sex differences, 907
social behavior, 907
somatostatin levels, 771
somatostatin-like immunoreactivity, 771
stress, 907
stroke, 907
thermoregulation, 907
tolerance, 907
wolves, 969

Eel calcitonin, 315
antinociceptive activity
binding site distribution

Effector mechanisms, s101
exocrine pancreas
liver
vasoactive intestinal peptide

Elasmobranches, s21
purification and characterization
vasoactive intestinal peptide

Electron microscopy
cryoprotectant, 155
GnRH agonists, 459
GnRH antagonists, 459
gonadotropes, 459
immunocytochemistry, 155
peptide immunoreactivity, 155
tissue morphology, 155

Electrophysiological effects, s265
human studies
paroxysmal supraventricular tachycardia
somatostatin

Electrophysiological signs, 189
attention
human studies, twins
vasopressin

Electrotransfer, s7
human neuroblastoma cell
immunoblot
PHM identification
VIP identification

Endocrine pancreatic cell line, s261
somatostatin-14
somatostatin-28

Endogenous opiates, review, 907
alcohol
cardiovascular responses
dependence
drinking
eating
immune system
learning
locomotor activity
memory
mental illness
respiration
seizures
sex differences
social behavior
stress
stroke
thermoregulation
tolerance

Endogenous opioids, 977
blood pressure
α-neo-endorphin
β-neo-endorphin
heart rate
naltrexone
spontaneously hypertensive rats

Endogenous protease, 407
atrial natriuretic factor
cleavage site

β-Endorphin
adrenocorticotropin, 597
anterior pituitary lobe, 603
aprotinin, 369
arginine-vasopressin, 267
bacitracin, 369
corticosteroidogenesis, 237
corticotropin releasing factor, 603
dogfish sharks, 119
dynorphin, 237, 267
Met-enkephalin, 369
inhibitory effect, 369

β-lipotropin, 603
naloxone blockade, 597
opioid peptides, 237
pituitary, 119
posttranslational processing, 119
pressor responses, 597
rat ovaries, 267
spinal release, 369
strain differences, 267
stress, 603
α-neo-Endorphin
blood pressure, 977
duodenum, 389
dynorphin-A(1–8), 389
endogenous opioids, 977
β-neo-endorphin, 977
heart rate, 977
intramural perikarya, 389
naltrexone, 977
spontaneously hypertensive rats, 977
β-neo-Endorpin, 977
blood pressure
endogenous opioids
α-neo-endorphin
heart rate
naltrexone
spontaneously hypertensive rats
β-Endorphin levels, 775
alpha-adrenergic system
dopaminergic mechanisms
drug interaction
estrogen
ovariectomy
Endorphinic neurons, 1197
arcuate nucleus
hypothalamus
neuronal contact
proopiomelanocortin
tuberoinfundibular dopaminergic neurons
Endothelium, s225
animal models
pulmonary artery
vascular relaxation
vasoactive intestinal polypeptide
Energy metabolism, s169
blood flow
cerebral cortex
intercellular communication
neuronal activity
vasoactive intestinal peptide
Enkephalins
carotid body, 767
copper deficiency, 1061
Met$^5$-enkephalin-Arg$^6$-Gly$^7$-Leu$^8$, 735
flexion ratio, 551
gut nerves, 735
human gastrointestinal tract, 735
insulin, 1061
pancreas, 1061
physiological chemoreceptor stimulus, 767
postural asymmetry, 551
rabbits, 767
substance P, 767
Met-Enkephalin
antinociception, 419
aprotinin, 369
bacitracin, 369
β-endorphin, 369
inhibitory effect, 369
spinal release, 369
substance P, 419
tachykinins, 419
Met-Enkephalin content, 39
analgesia
Lys-Trp (Nps)
periaqueductal gray
Met-Enkephalin-like-immunoreactivity, 277
dopamine receptor stimulation
neurointermediate pituitary
Met$^5$-Enkephalin-Arg$^6$-Gly$^7$-Leu$^8$, 735
enkephalins
gut nerves
human gastrointestinal tract
Enteroglucagon, s37
biological significance
gastric acid secretion
tissue specificity
Enzyme inhibitors, 383
human plasma
in vitro
neurotensin
Enzymic degradation, 247
dermorphin
high performance liquid chromatography
in vitro
Epicardial application, 1087
cardiovascular response
dose-dependent effects
guinea pigs
neurotensin
tachycardia
Epidermal growth factor, 45
anterior pituitary gland
in vivo
Estrogen, 775
alpha-adrenergic system
dopaminergic mechanisms
drug interaction
β-endorphin levels
ovariectomy
dET$_2$Tyr(ET)Orn$^8$ vasotocin, 695
bradycardia
gastric acid secretion
hypothalamic paraventricular nucleus
oxytocin agonist
Exocrine pancreas
acinar cells, s245
effector mechanisms, s101
in vivo studies, s245
liver, s101
rat hypothalamic growth hormone releasing factor, s245
vasoactive intestinal peptide, s101
Extra-sleep effects, 1165
adrenergic transmission
delta-sleep-inducing peptide
natural occurrence
physiological functions
sleep
therapeutic potential

fa gene, 61
body weight regulation
hyperinsulinemia
insulin binding
Fetal adrenal gland, 413
catecholamine secretion
fetal twins
sheep
VIP distribution
Fetal twins, 413
catecholamine secretion
fetal adrenal gland
sheep
VIP distribution
Fish, 79
central nervous system
corticotropin-releasing factor
immunoreactivity
urotensin I
Flexion ratio, 551
enkephalins
postural asymmetry
Food intake
body weight, 1079
bombesin, 729, 1079
calcitonin, 729, 1079
cholecystokinin, 729, 1079
food intake, 729
glucagon, 1079
hamsters, 1079
lactation, 729
photoperiod/peptide interactions, 1079
Food intake stimulation, 711
nucleus accumbens
opioid microinjections
Frogs
atrial natriuretic factor, 573
atrium, 573
biosynthesis, 163
gel filtration, 573
immunocytochemistry, 573
localization and characterization, 573
pars intermedia, 163
peptide processing, 163
proopiomelanocortin, 163
tunicamycin, 163

GABA complex modulation, 259
barbiturates
dogs
hemodynamic responses
intravenous administration
methionine-enkephalin
GABAergic regulation, 253
hybridization techniques
POMC gene expression
Galanin
anterior pituitary function, 51
genitourinary tract, 5
growth hormone, 51
hypothalamus, 51
median eminence, 51
$^{125}$I-Galanin binding sites, 1029
autoradiographic distribution
central nervous system
Galanin-like immunoreactivity, 609
high performance liquid chromatography
Gastric acid secretion
biological significance, s37

bradycardia, 695
cAMP, s155
enteroglucagon, s37
hypothalamic paraventricular nucleus, 695
liquid meal, s253
oxyntomodulin, s253, s257
oxytocin agonist, 695
peptide interactions, s257
receptor activity, s155
secretin, s155
somatostatin, s257
structure-activity relationship, s155
tissue specificity, s37
$dET_2Tyr(ET)Orn^8$ vasotocin, 695
Gastric inhibitory peptide, s121
gastric receptors
glucagon-29
glucagon-37
human gastric cancer cell line
vasoactive intestinal peptide
Gastric inhibitory polypeptide receptor, s75
biological gastric inhibitory polypeptide activity
insulin release
Gastric receptors, s121
gastric inhibitory peptide
glucagon-29
glucagon-37
human gastric cancer cell line
vasoactive intestinal peptide
Gastrin release
bombesin-like immunoreactivity, 127
growth hormone-releasing factor, 127, s241
peptide histidine isoleucine, 127
peptidergic neurotransmitter, 127
somatostatin release, 127
vasoactive intestinal peptide, 127
Gel filtration, 573
atrial natriuretic factor
atrium
frogs
immunocytochemistry
localization and characterization
Gene expression, 1147
atrial natriuretic factor
heart ventricular tissue
*in situ* hybridization
Gene organization, s27
glucagon superfamily
precursor structure
Genitourinary tract, 5
galanin
Glucagon
body weight, 1079
bombesin, 969, 1079
calcitonin, 969, 1079
cholecystokinin octapeptide, 969, 1079
conformational analysis, s43
food intake, 969, 1079
hamsters, 1079
hyperglycemia, 969
hyperinsulinemia, 969
peptide analogs, s43
peripheral administration, 969
photoperiod/peptide interactions, 1079
secondary-tertiary structure, s43
secretin, s43
vasoactive intestinal peptide, s43
wolves, 969
Glucagon-29, s121
gastric inhibitory peptide
gastric receptors
glucagon-37
human gastric cancer cell line
vasoactive intestinal peptide
Glucagon-37, s121
gastric inhibitory peptide
gastric receptors
glucagon-29
human gastric cancer cell line
vasoactive intestinal peptide
Glucagon analogs
adenylate cyclase, s109
conformation, s69
glycogenolytic activity, s69
heart, s109
liver, s109
structure-activity relationship, s69
Glucagon biosynthesis, 331
anglerfish islet
post-translational processing
preproglucagon
Glucagon secretion, s249
hypercalcemia
infantile renal tumors
Glucagon stimulations, 645
adenylate cyclase
portacaval anastomosis
secretin concentrations
Glucagon superfamily, s27
gene organization
precursor structure
Glycogenolysis, s175
adenohypophysis
cerebral cortex
cyclic AMP
human growth hormone-releasing factor
peptide comparisons
peptide histidine isoleucine
secretin
vasoactive intestinal peptide
Glycogenolytic activity, s69
conformation
glucagon analogs
structure-activity relationship
Glycoproteins, 791
mammalian lungs
vasoactive intestinal peptide receptors
Glycosylation, 659
opioid peptides
pituitary hormones
proteolytic processing
GnRH agonists, 459
electron microscopy
GnRH antagonists
gonadotropes
GnRH antagonists, 459
electron microscopy
GnRH agonists
gonadotropes
GnRH receptors, 1137
complementary GnRH
complementary GnRH antiserum
gonadotropin-releasing hormone mRNA
rabbits
receptor recognition, antiserum
GnRH structure, 827
amphibian brain
chicken GnRH II
vertebrate brain GnRH
Gonadotropes, 459
electron microscopy
GnRH agonists
GnRH antagonists
Gonadotropin-releasing hormone
alligator/lizard/skink comparisons, 1101
brain, reptile, 1101
complementary GnRH, 1137
complementary GnRH antiserum, 1137
GnRH receptors, 1137
molecular form identification, 1101
mRNA, 1137
rabbits, 1137
receptor recognition, antiserum, 1137
Grooming
ACTH, 1
adrenocorticotrophic hormone, 651
anterior ventral third ventricle site, 651
melanotropins, 1
pigment dispersion, 1
structure activity, 1
Growth hormone
anterior pituitary function, 51
dose-effect relationship, s281
galanin, 51
human growth hormone-releasing factor, s281
human studies, males, s281
hypothalamus, 51
median eminence, 51
route of administration, s281
Growth hormone-releasing factor
design strategies, s49
growth hormone secretion, 393
perinatal period, 393
structure-activity relationship, s49
synthetic analogs, s49
Growth hormone-releasing factor-40, 127
bombesin-like immunoreactivity
gastrin release
peptide histidine isoleucine
peptidergic neurotransmitter
somatostatin release
vasoactive intestinal peptide
Growth hormone-releasing factor analogs, s53
adenylate cyclase
vasoactive intestinal peptide
Growth hormone releasing hormone, s241
gastrin release
Growth hormone-releasing hormone concentrations, 1011
growth hormone replacement
hypophysectomy
hypothalamus
Growth hormone replacement, 1011
growth hormone-releasing hormone concentrations


---

Numbers preceded by the letter "s" indicate items appearing in *VIP and Related Substances . . .* Suppl., Vol. 7, 1986.

hypophysectomy
hypothalamus
Growth hormone secretion, 393
growth hormone-releasing factor
perinatal period
Guinea pig brain, 855
autoradiographic localization
pharmacological characterization
species differences
substance P receptors
Guinea pig ileum
dermorphin, 755
dermorphin-like peptides, 755
mouse vas deferens, 755
myenteric plexus, 623
neuropeptide Y, 623
neurotensin, 431
opioid receptor binding, 755
Guinea pig isolated heart
coronary vessels, 431
myocardial perfusion pressure, 27
myocardial tension, 27
neuropeptide Y, 27
neurotensin, 431
vagal nerves, 431
Guinea pig lung, s147
CHAPS
solubilization
vasoactive intestinal peptide receptors
Guinea pig myenteric plexus, 761
substance P immunoreactivity
synaptosomes
Guinea pigs
acetylcholine release, 289
bradykinin, 289
cardiovascular response, 1087
dose-dependent effects, 1087
epicardial application, 1087
myenteric plexus, 289
neurotensin, 1087
prostaglandin, 289
tachycardia, 1087
Gut nerves, 735
Met$^5$-enkephalin-Arg$^6$-Gly$^7$-Leu$^8$
enkephalins
human gastrointestinal tract

Hamsters, 1079
body weight
bombesin
calcitonin
cholecystokinin octapeptide
food intake
glucagon
photoperiod/peptide interactions
Heart, s109
adenylate cyclase
glucagon analogs
liver
Heart failure, 33
atria levels
α-human atrial natriuretic peptide
hypertension
plasma levels
Heart rate
blood pressure, 337, 977
calcitonin gene-related peptide, 337
central amygdaloid nucleus, 337
endogenous opioids, 977
α-neo-endorphin, 977
β-neo-endorphin, 977
naltrexone, 977
spontaneously hypertensive rats, 977
Heart ventricular tissue, 1147
atrial natriuretic factor
gene expression
*in situ* hybridization
Helodermin, s237
blood flow
dogs
structure-function relationship
vasoactive intestinal polypeptide-like effect
Helodermin, natural, s79
adenylate cyclase
helodermin, synthetic
liver
VIP receptors
Helodermin, synthetic, s79
adenylate cyclase
helodermin, natural
liver
VIP receptors
Hemodynamic responses, 259
barbiturates
dogs
GABA complex modulation
intravenous administration
methionine-enkephalin
Hepatectomy, s273
intestinal epithelial cells
liver plasma membranes
vasoactive intestinal peptide
High performance liquid chromatography
adrenocorticotropin, 591
dermorphin, 247
dihydroxyalkyl bonded silica support, 481
enzymic degradation, 247
galanin-like immunoreactivity, 609
hypothalamus, 591
in vitro, 247
proteins, 481
Hormone
atrial natriuretic factor, 1147
corticotropin-releasing factor, 603
cortisol, s281
estradiol benzoate, 775
growth hormone, s281, 1011
insulin, s75, s83, 1061
luteinizing hormone-releasing hormone, 705
α-melanocyte stimulating hormone, 581
norepinephrine, 473, 705
prolactin, s281, 541
prostaglandin, 289
$H^+$-production, 885
[$^{14}$C]-aminopyrine uptake
isolated parietal cells
opioid peptides
HT29 cells, 849
adenylate cyclase regulation
peptide receptor antagonists
vasoactive intestinal peptide
HT29-18 cells, s113
intestinal development
vasoactive intestinal peptide receptor activity
α-Human atrial natriuretic peptide, 33
atria levels
heart failure
hypertension
plasma levels
α-Human atrial natriuretic polypeptide, 141
body fluid regulation
human plasma
Human calcitonin gene-related peptide, 631
drug interaction
inotropic action
in vitro
Human colon adenocarcinoma cells, s137
binding sites
monoclonal antibodies
receptor mediated endocytosis
vasoactive intestinal peptide
Human colon carcinoma cells, s129
internalization
vasoactive intestinal peptide processing
Human colonic HT 29 cell line, 1071
catabolism
neuroblastoma clone N1E115
neurotensin inactivation
Human forebrain, 877
immunocytochemistry
somatostatin distribution
Human gastric cancer cell line, s121
gastric inhibitory peptide
gastric receptors
glucagon-29
glucagon-37
vasoactive intestinal peptide
Human gastrointestinal tract, 735
Met$^5$-enkephalin-Arg$^6$-Gly$^7$-Leu$^8$
enkephalins
gut nerves
Human growth hormone-releasing factor
adenohypophysis, s175
cerebral cortex, s175
cyclic AMP, s175
dose-effect relationship, s281
glycogenolysis, s175
growth hormone, s281
human studies, males, s281
peptide comparisons, s175
peptide histidine isoleucine, s175
route of administration, s281
secretin, s175
vasoactive intestinal peptide, s175
Human neuroblastoma cell, s7
electrotransfer
immunoblot
PHM identification
VIP identification
Human pancreatic cancer cell line, s267
secretin
vasoactive intestinal peptide
Human pancreatic polypeptide, 1193
cerebrospinal fluid
alcoholic/non-alcoholic comparisons


---

Numbers preceded by the letter "s" indicate items appearing in *VIP and Related Substances . . .* Suppl., Vol. 7, 1986.

human studies
immunoreactivity
motilin
Human plasma
body fluid regulation, 141
eating, 15
enzyme inhibitors, 383
α-human atrial natriuretic polypeptide, 141
in vitro, 383
metabolism, 15
neurotensin, 383
neurotensin-like immunoreactivity, 15
Human studies
alcoholic/non-alcoholic comparisons, 1193
asthma, s279
bronchodilation, s279
cerebrospinal fluid, 455, 1193
electrophysiologic effects, s265
human pancreatic polypeptide, 1193
immunoreactivity, 1193
motilin, 1193
neuropeptide Y immunoreactivity, 455
paroxysmal supraventricular tachycardia, s265
somatostatin, s265
vasoactive intestinal peptide, s279
Human studies, males, s281
dose-effect relationship
growth hormone
human growth hormone-releasing factor
route of administration
Human studies, twins, 189
attention
electrophysiological signs
vasopressin
Human sweat glands, isolated, s151
binding sites
sweat secretion regulation
vasoactive intestinal peptide
Human tumor, s1
structure and expression
vasoactive intestinal peptide gene
Hybridization techniques, 253
GABAergic regulation
POMC gene expression
Hydrophobicity, 1131
arginine modification
bovine parathyroid hormone peptide
conformational changes
hypotensive response
methionine oxidation
vascular activity
5-Hydroxytryptamine secretion, 171
limulin
mast cells
neuraminidase
substance P
5-Hydroxytryptophan synthetic peptides, 995
analgesia
jump thresholds
pain
systemic administration
tail-flick test
tolerance
Hypercalcemia, s249
glucagon secretion
infantile renal tumors
Hyperglycemia, 969
bombesin
calcitonin
cholecystokinin octapeptide
eating
glucagon
hyperinsulinemia
peripheral administration
wolves
Hyperinsulinemia
body weight regulation, 61
bombesin, 969
calcitonin, 969
cholecystokinin octapeptide, 969
eating, 969
fa gene, 61
glucagon, 969
hyperglycemia, 969
insulin binding, 61
peripheral administration, 969
wolves, 969
Hyperphagia, 1189
hypothalamus
neuropeptide Y
obesity
Hypertension
arginine vasopressin, 569
atria levels, 33
drug interaction, 569
heart failure, 33
α-human atrial natriuretic peptide, 33
plasma levels, 33
sympathoadrenal system, 569
tachycardia, 569
Hypophysectomy, 1011
growth hormone-releasing hormone concentrations
growth hormone replacement
hypothalamus
Hypophysial portal blood, 705
luteinizing hormone secretion
norepinephrine
Hypotensive response, 1131
arginine modification
bovine parathyroid hormone peptide
conformational changes
hydrophobicity
methionine oxidation
vascular activity
Hypothalamic paraventricular nucleus, 695
bradycardia
gastric acid secretion
oxytocin agonist
$dET_2Tyr(ET)Orn^8$ vasotocin
Hypothalamus
adrenocorticotropin, 591
amygdala, 341
anterior pituitary function, 51
arcuate nucleus, 1197
catabolism, 225
dorsal vagal complex, 341
dynorphin, 225
endorphinic neurons, 1197
galanin, 51
growth hormone, 51
growth hormone-releasing hormone concentrations, 1011
growth hormone replacement, 1011
high pressure liquid chromatography, 591
hyperphagia, 1189
hypophysectomy, 1011
median eminence, 51
neuronal contact, 1197
neuropeptide Y, 341, 1189
neurotensin, 225
obesity, 1189
peptidase inhibitors, 225
proopiomelanocortin, 1197
tuberoinfundibular dopaminergic neurons, 1197

$^{123}$I-FK 33-824, 351
opioid receptors
radioautographic labeling
Immune system, 907
alcohol
cardiovascular responses
dependence
drinking
eating
endogenous opiates, review
learning
locomotor activity
memory
mental illness
respiration
seizures
sex differences
social behavior
stress
stroke
thermoregulation
tolerance
Immunoblot, s7
electrotransfer
human neuroblastoma cell
PHM identification
VIP identification
Immunocytochemistry
atrial natriuretic factor, 573
atrium, 573
choline acetyltransferase, 899
cryoprotectant, 155
differential sensitivity, 783
electron microscopy, 155
frogs, 573
gel filtration, 573
human forebrain, 877
localization and characterization, 573
monosodium glutamate, 783
nervus terminalis, 899
neurotoxic effects, 783
opiocortin, 783
peptide immunoreactivity, 155
somatostatin distribution, 877
substance P fibers, 899
tissue morphology, 155
tyrosine hydroxylase, 783
vasoactive intestinal polypeptide, 899


Numbers preceded by the letter "s" indicate items appearing in *VIP and Related Substances . . .* Suppl., Vol. 7, 1986.

Immunohistochemistry, 297
central nervous system
chromatographic studies
lampreys
tachykinin-like peptides
Immunoreactivity
alcoholic/non-alcoholic comparisons, 1193
biochemical characterization, 815
brain, gerbil, 973
carotid ligation, 973
central nervous system, 79, 1043
cerebral ischemia, 973
cerebrospinal fluid, 1193
cholecystokinin octapeptide, 973
corticotropin-releasing factor, 79
fish, 79
human pancreatic polypeptide, 1193
human studies, 1193
localization in synaptosomes, 815
mechanism of release, 815
motilin, 1193
neuromedin B-like peptides, 815
neuropeptide K, 1043
tachykinins, 1043
urotensin I, 79
Infantile renal tumors, s249
glucagon secretion
hypercalcemia
Inhibition, 87
converting activity
Leumorphin
opioids
Inhibitory effect
aprotinin, 369
bacitracin, 369
β-endorphin, 369
Met-enkephalin, 369
lordosis, 581
α-melanocyte stimulating hormone, 581
receptivity, 581
spinal release, 369
Inotropic action, 631
drug interaction
human calcitonin gene-related peptide
in vitro
*In situ* hybridization, 1147
atrial natriuretic factor
gene expression
heart ventricular tissue
Insulin, 1061
copper deficiency
enkephalins
pancreas
Insulin binding, 61
body weight regulation
fa gene
hyperinsulinemia
Insulin release
biological gastric inhibitory polypeptide activity, s75
gastric inhibitory polypeptide receptor, s75
peptide histidine isoleucine, s83
structure-function relationship, s83
Intercellular communication, s169
blood flow
cerebral cortex
energy metabolism
neuronal activity
vasoactive intestinal peptide
Intermediate lobe of pituitary, 615
amino-terminal fragment of POMC
peptide biosynthesis
proopiomelanocortin
reversed phase HPLC
Internalization, s129
human colon carcinoma cells
vasoactive intestinal peptide processing
Intestinal development, s113
HT 29-18 cells
vasoactive intestinal peptide receptor activity
Intestinal epithelial cells, s273
hepatectomy
liver plasma membranes
vasoactive intestinal peptide
Intestinal motility, 73
corticotropin
corticotropin-releasing factor
cortisol
dogs
Intramural perikarya, 389
duodenum
dynorphin-A(1–8)
α-neo-endorphin
Intravenous administration, 259
barbiturates
dogs
GABA complex modulation
hemodynamic responses
methionine-enkephalin
Intraventricular administration, 541
arginine vasopressin
preovulatory prolactin surge
In vitro
acetylcholine, 425
ACTH, 425
adrenergic transmission, 1001
autoradiographic localization, 283
CCK-8 stimulation, 473
cholinergic muscarinic receptor binding, 21
cyclic nucleotides, 357
delta sleep-inducing peptide, 1001
dermorphin, 247
desensitization, 473
dog duodenal mucosal explants, s229
drug interaction, 631
enzyme inhibitors, 383
enzymic degradation, 247
high performance liquid chromatography, 247
human calcitonin gene-related peptide, 631
human plasma, 383
inotropic action, 631
in vivo, 1001
melanotropin release inhibiting factor, 21
muscarinic receptors, 425
N-acetyltransferase activity, 1001
neurohormonal regulation, s229
neurotensin, 383
non-sulfated CCK-8, 473
pineal, 1001
QNB binding, 425
$^3$H-quinuclidinyl benzilate, 21
secretin secretion, s229, 357
striatum, 21
sulfated CCK-8, 473
ventromedial hypothalamus, 473
VIP receptors, 283
In vitro release, 97
cholecystokinin octapeptide
dopamine receptors
somatostatin
striatal amino acids
In vivo
acinar cells, s245
adrenergic transmission, 1001
adrenocorticotropic hormone, 1153
anterior pituitary gland, 45
corticotropin-releasing factor, 1153
cyclic AMP, 1153
delta sleep-inducing peptide, 1001
epidermal growth factor, 45
exocrine pancreatic secretion, s245
in vitro, 1001
N-acetyltransferase activity, 1001
pineal, 1001
pituitary, 1153
rat hypothalamic growth hormone-releasing factor, s245
stress, 1153
In vivo half-life, 241
atrial natriuretic factor
cold iodinated ANF peptides
Isolated parietal cells, 885
[$^{14}$C]-aminopyrine cells
$H^+$-production
opioid peptides

Jump thresholds, 995
analgesia
5-hydroxytryptophan synthetic peptides
pain
systemic administration
tail-flick test
tolerance

Kidneys, rats, 865
adenylate cyclase activity
renal effects
secretin receptors

Lactation, 729
bombesin
calcitonin
cholecystokinin
food intake
Lampreys, 297
central nervous system
chromatographic studies
immunohistochemistry
tachykinin-like peptides
Learning, 907
alcohol


Numbers preceded by the letter "s" indicate items appearing in *VIP and Related Substances . . .* Suppl., Vol. 7, 1986.

cardiovascular responses
dependence
drinking
eating
endogenous opiates, review
immune system
locomotor activity
memory
mental illness
respiration
seizures
sex differences
social behavior
stress
stroke
thermoregulation
tolerance
Lesion effects, 669
depolarized slice formation
opioid peptide release
regional distribution
Lesions, electrolytic, 801
adrenocorticotropin-immunoreactive neurons
cat forebrain
Lesions, monosodium-L-glutamate, 749
discrete brain nuclei
neonatal MSG treatment
neurotoxin effects
oxytocin
somatostatin
vasopressin
Lesions, paraventricular nucleus, 111
analgesia
arginine vasopressin
pain inhibition
Leumorphin, 87
converting activity
inhibition
opioids
Ligand binding sites, s89
specificities
VIP family peptides
Limulin, 171
5-hydroxytryptamine secretion
mast cells
neuraminidase
substance P
β-Lipotropin, 603
anterior pituitary lobe
corticotropin releasing factor
β-endorphin
stress
Liquid meal, s253
gastric acid secretion
oxyntomodulin
Liver
adenylate cyclase, s79, s109
effector mechanisms, s101
exocrine pancreas, s101
glucagon analogs, s109
heart, s109
helodermin, natural, s79
helodermin, synthetic, s79
vasoactive intestinal peptide, s101
VIP receptors, s79
Liver plasma membranes, s273
hepatectomy
intestinal epithelial cells
vasoactive intestinal peptide
Localization and characterization, 573
atrial natriuretic factor
atrium
frogs
gel filtration
immunocytochemistry
Localization in synaptosomes, 815
biochemical characterization
immunoreactivity
mechanism of release
neuromedin B-like peptides
Locomotor activity
alcohol, 907
capsaicin, 587
cardiovascular responses, 907
cholecystokinin, 587
delayed response performance, 201
dependence, 907
drinking, 907
eating, 907
endogenous opiates, review, 907
immune system, 907
learning, 907
memory, 907
mental illness, 907
MSH/ACTH 4–10 administration, 201
respiration, 907
seizures, 907
sex differences, 907
social behavior, 907
stress, 907
stroke, 907
thermoregulation, 907
tolerance, 907
vagotomy, 587
Lordosis, 581
inhibitory actions
α-melanocyte stimulating hormone
receptivity
Low affinity binding, 177
lymphoid cells
vasoactive intestinal peptides
Luteinizing hormone secretion, 705
hypophysial portal blood
norepinephrine
Lymphoid cells, 177
low affinity binding
vasoactive intestinal peptides
Lysine-8-vasopressin, 539
blood pressure effects
route of administration
Lys-Trp (Nps), 39
analgesia
Met-enkephalin content
periaqueductal gray

Magnetic fields, 449
opiate-induced analgesia
Mammalian lungs, 791
glycoproteins
vasoactive intestinal peptide receptors
Mast cells, 171
5-hydroxytryptamine secretion
limulin
neuraminidase
substance P
MCH-like immunoreactivity, 941
brain, frogs
melanin-concentrating hormone
peptide distribution
Mechanism of release, 815
biochemical characterization
immunoreactivity
localization in synaptosomes
neuromedin B-like peptides
Median eminence, 51
anterior pituitary function
galanin
growth hormone
hypothalamus
Melanin-concentrating hormone, 941
brain, frogs
MCH-like immunoreactivity
peptide distribution
α-Melanocyte stimulating hormone, 581
inhibitory actions
lordosis
receptivity
Melanoma cells, 437
cyclic AMP
tyrosinase
Melanotropin release inhibiting factor, 21
cholinergic muscarinic receptor binding
in vitro
$^3$H-quinuclidinyl benzilate
striatum
Melanotropins, 1
ACTH
grooming
pigment dispersion
structure activity
Memory, 907
alcohol
cardiovascular responses
dependence
drinking
eating
endogenous opiates, review
immune system
learning
locomotor activity
mental illness
respiration
seizures
sex differences
social behavior
stress
stroke
thermoregulation
tolerance
Memory process, 11
avoidance
discriminative learning
β-(Tyr$^0$)MSH$_{9-18}$
shock induced amnesia
Mental illness, 907
alcohol
cardiovascular responses
dependence
drinking
eating
endogenous opiates, review
immune system


Numbers preceded by the letter "s" indicate items appearing in *VIP and Related Substances . . .* Suppl., Vol. 7, 1986.

learning
locomotor activity
memory
respiration
seizures
sex differences
social behavior
stress
stroke
thermoregulation
tolerance
Metabolism, 15
eating
human plasma
neurotensin-like immunoreactivity
Methamphetamine treatment, 983
neurokinin A
peptide comparisons
striatum
substance P
substantia nigra
Methionine-enkephalin, 259
barbiturates
dogs
GABA complex modulation
hemodynamic responses
intravenous administration
Methionine oxidation, 1131
arginine modification
bovine parathyroid hormone peptide
conformational changes
hydrophobicity
hypotensive changes
vascular activity
Method
autoradiography, 45, 283, 315, 679, 855, 873, 1029, 1109, 1197
bioassay, 835
cation-exchange chromatography, 27
chloramine-T, s151
dextran-charcoal, 393
double bridge peroxidase-antiperoxidase method, s7
droplet countercurrent chromatography, s237
dual staining immunocytochemistry, 891
ECS, 11
electron microscopy, 155, 459, 573, 941, 1121
electrotransfer, s7
fast atom bombardment mass spectrometry, 119
gel chromatography, 5, 717, 775
gel electrophoresis, 659
gel filtration, s21, s83, s237, s261, 383, 573, 815, 1101
gel permeation chromatography, 297
high performance liquid chromatography, 67, s69, 97, 119, s129, 141, 163, s237, 247, 297, 481, 609, 669, 815, 827, 1071, 1101
high pressure liquid chromatography, 383, 455, 591, 723
immunocytochemistry, 5, s7, 67, 79, 111, 155, s205, 267, 413, 573, 783, 877, 899, 1147, 1165, 1197
immunofluorescence, 341, 381, 573, 941
immunogold technique, 941
immunohistochemistry, 33, s83, 147, s169, 297, 1011, 1043, 1137
ion-exchange chromatography, s21, 297, 1015
light microscopy, s151
microsequencing, 67
molecular sieving of plasma, 603
PAP immunodetection, s7
pulse-chase technique, 397
quantitative autoradiography, 1021
radioimmunoassay, 5, 15, s21, 33, s83, 111, 119, 127, 141, s197, s205, s221, s241, s281, 297, 365, 393, 573, 669, 717, 735, 767, 827, 835, 1011, 1165
radioimmunoassay with region-specific antisera, 1101
radioligand binding assay, 849
retrograde tracing, s205, 341
reverse phase HPLC, s21, 27, s83, 147, s151, 225, s261, 331, 615
SDS-gel electrophoresis, 163
sodium dodecyl sulfate-polyacrilamide gel electrophoresis, 791
surface tensiometry, 1121
thin-layer-chromatography, 705
Micropurification techniques, 689
amino acid sequences
dog/goat comparisons
progastrin
Mixed micelles of lipids and nonionic surfactant, 1121
acidic lipids
bradykinin
peptide-amphiphile interactions
sodium dodecyl sulfate
Molecular form identification, 1101
alligator/lizard/skink comparisons
brain, reptile
gonadotropin-releasing hormone
Mollusks, 637
bag cell homogenates
cleavage
neuropeptide processing activity
Monkeys, cynomolgus, 465
corticotropin-releasing hormone
vasodilator
Monoclonal antibodies, s137
binding sites
human colonic adenocarcinoma cells
receptor mediated endocytosis
vasoactive intestinal peptide
Monosodium glutamate, 783
differential sensitivity
immunocytochemistry
neurotoxic effects
opiocortin
tyrosine hydroxylase
Motilin, 1193
alcoholic/non-alcoholic comparisons
cerebrospinal fluid
human pancreatic polypeptide
human studies
immunoreactivity
Mouse vas deferens, 755
dermorphin
dermorphin-like peptides
guinea pig ileum
opioid receptor binding
mRNA, 1137
complementary GnRH
complementary GnRH antiserum
GnRH receptors
gonadotropin-releasing hormone
rabbits
receptor recognition, antiserum
α-MSH, 843
ACTH-(1–24)
anorexia
eating
opioids
MSH/ACTH 4–10 administration, 201
delayed response performance
locomotor activity
Muscarinic receptors, 425
acetylcholine
ACTH
in vitro
muscarinic receptors
QNB binding
Myenteric plexus
acetylcholine release, 289
bradykinin, 289
guinea pig ileum, 623
guinea pigs, 289
neuropeptide Y, 623
prostaglandin, 289
Myocardial perfusion pressure, 27
guinea pig isolated heart
myocardial tension
neuropeptide Y
Myocardial tension, 27
guinea pig isolated heart
myocardial perfusion pressure
neuropeptide Y
Myometrium, s201
cats
smooth muscle relaxation
vasoactive intestinal polypeptide

Naloxone blockade, 597
adrenocorticotropin
β-endorphin
pressor responses
Naltrexone, 977
blood pressure
endogenous opioids
α-neo-endorphin
β-neo-endorphin
heart rate
spontaneously hypertensive rats
Natural occurrence, 1165
adrenergic transmission
delta-sleep-inducing peptide
extra-sleep effects
physiological functions
sleep
therapeutic potential
Neonatal MSG treatment, 749
discrete brain nuclei
lesions, monosodium-L-glutamate
neurotoxin effects
oxytocin
somatostatin
vasopressin


Numbers preceded by the letter "s" indicate items appearing in *VIP and Related Substances . . .* Suppl., Vol. 7, 1986.

Nervus terminalis, 899
choline acetyltransferase
immunocytochemistry
substance P fibers
vasoactive intestinal polypeptide
Neuroaminidase, 171
5-hydroxytryptamine secretion
limulin
mast cells
substance P
Neuroblastoma clone N1E115, 1071
catabolism
human colonic HT29 cell line
neurotensin inactivation
Neurohormonal regulation, s229
dog duodenal mucosal explants
in vitro
secretin secretion
Neurointermediate pituitary, 277
dopamine receptor stimulation
Met-enkephalin-like immunoreactivity
Neurokinin A, 983
methamphetamine treatment
peptide comparisons
striatum
substance P
substantia nigra
Neuromedin B-like peptides, 815
biochemical characterization
immunoreactivity
localization in synaptosomes
mechanism of release
Neuronal activity, s169
blood flow
cerebral cortex
energy metabolism
intercellular communication
vasoactive intestinal peptide
Neuronal contact, 1197
arcuate nucleus
endorphinic neurons
hypothalamus
proopiomelanocortin
tuberoinfundibular dopaminergic neurons
Neuropeptide K, 1043
central nervous system
immunoreactivity
tachykinins
Neuropeptide processing activity, 637
bag cell homogenates
cleavage
mollusks
Neuropeptides
analgesia, 1095
CNS binding sites, 1109
cytosol, 741
peptide receptors, 1109
rabbits, 741, 1095
renal papilla, 741
somatostatin binding sites, 741
stress, pain induced, 1095
tachykinins, 1109
Neuropeptide Y
amygdaloid, 341
coronary vasoconstriction, 821
dorsal vagal complex, 341
guinea pig ileum, 623
guinea pig isolated heart, 27
hyperphagia, 1189
hypothalamus, 341, 1189
myenteric plexus, 623
myocardial perfusion pressure, 27
myocardial tension, 27
obesity, 1189
opioid interactions, 323
pig heart, 821
reflex contractions, 323
stellate ganglia, 821
sympathetic nerve stimulation, 821
urinary bladder, 323
Neuropeptide Y immunoreactivity, 455
cerebrospinal fluid
human studies
Neuropeptide Y receptors, 55
autoradiographic localization
binding sites
Neurotensin
cardiovascular response, 1087
catabolism, 225
coronary vessels, 431
dose-dependent effects, 1087
dynorphin, 225
enzyme inhibitors, 383
epicardial application, 1087
guinea pig isolated heart, 431
guinea pigs, 1087
human plasma, 383
hypothalamus, 225
in vitro, 383
peptidase inhibitors, 225
tachycardia, 1087
vagal nerves, 431
Neurotensin inactivation, 1071
catabolism
human colonic HT29 cell line
neuroblastoma clone N1E115
Neurotensin-like immunoreactivity, 15
eating
human plasma
metabolism
Neurotoxic effects
differential sensitivity, 783
discrete brain nuclei, 749
immunocytochemistry, 783
lesions, monosodium-L-glutamate, 749
monosodium glutamate, 783
neonatal MSG treatment, 749
opiocortin, 783
oxytocin, 749
somatostatin, 749
tyrosine hydroxylase, 783
vasopressin, 749
Neutrophils, 961
C-reactive protein
phagocytosis
signal sequences
synthetic peptides
tuftsin
Nociception, 835
bombesin
substance K
substance P
Nociceptive mechanisms, 557
behavioral alterations
bombesin
substance P
Non-sulfated CCK-8, 473
CCK-8 stimulation
desensitization
in vitro
sulfated CCK-8
ventromedial hypothalamus
Norepinephrine, 705
hypophysial portal blood
luteinizing hormone secretion
NPY immunoreactive nerves, 147
anglerfish islets
aPY
Nucleus accumbens, 711
food intake stimulation
opioid microinjections

Obesity, 1189
hyperphagia
hypothalamus
neuropeptide Y
Octadecyl cartridges, 365
angiotensin II
radioimmunoassay
Opiate-induced analgesia, 449
magnetic fields
Opiate receptors, 195
D-amino acids
binding sites
β-casomorphin analogs
Opiocortin, 783
differential sensitivity
immunocytochemistry
monosodium glutamate
neurotoxic effects
tyrosine hydroxylase
Opioid interactions, 323
neuropeptide Y
reflex contractions
urinary bladder
Opioid microinjections, 711
food intake stimulation
nucleus accumbens
Opioid peptide release, 669
depolarized slice formation
lesion effects
regional distribution
Opioid peptides
[$^{14}$C]-aminopyrine uptake, 885
corticosteroidogenesis, 237
dynorphin, 237
β-endorphin, 237
glycosylation, 659
$H^+$-production, 885
isolated parietal cells, 885
pituitary hormones, 659
proteolytic processing, 659
Opioid receptor binding, 755
dermorphin
dermorphin-like peptides
guinea pig ileum
mouse vas deferens
Opioid receptors, 351
$^{125}$I-FK 33-824
radiographic labeling
Opioids
ACTH-(1–24), 843
anorexia, 843


Numbers preceded by the letter "s" indicate items appearing in *VIP and Related Substances . . .* Suppl., Vol. 7, 1986.

converting activity, 87
eating, 745, 843
inhibition, 87
Leumorphin, 87
α-MSH, 843
rabbits, 745
Osmotic stimuli, 989
arginine vasopressin
atrial natriuretic factor
blood pressure
dehydration
Ovariectomy, 775
alpha-adrenergic system
dopaminergic mechanisms
drug interaction
β-endorphin levels
estrogen
Oxyntomodulin
gastric acid secretion, s253, s257
liquid meal, s253
peptide interactions, s257
somatostatin, s257
Oxytocin, 749
discrete brain nuclei
lesions, monosodium-L-glutamate
neonatal MSG treatment
neurotoxin effects
somatostatin
vasopressin
Oxytocin agonist, 695
bradycardia
gastric acid secretion
hypothalamic paraventricular nucleus
$dET_2Tyr(ET)Orn^8$ vasotocin

Pain, 995
analgesia
5-hydroxytryptophan synthetic peptides
jump thresholds
systemic administration
tail-flick test
tolerance
Pain inhibition, 111
analgesia
arginine vasopressin
lesions, paraventricular nucleus
Pancreas
bioactivity, 723
cholecystokinin octapeptide, 723
cholecystokinin-33, 723
copper deficiency, 1061
enkephalins, 1061
insulin, 1061
Pancreatic ancini, 953
binding sites
calcium ions
somatostatin receptors
Pancreatitis, caerulein induced, 1159
cholecystokinin antagonists
CR 1409
pancreatitis, taurocholate induced
proglumide
protective effect
Pancreatitis, taurocholate induced, 1159
cholecystokinin antagonists
CR 1409
proglumide
protective effect
Paraventricular neurons, 891
corticotropin-releasing factor
dual staining immunocytochemistry
vasopressin
Paroxysmal supraventricular tachycardia, s265
electrophysiologic effects
human studies
somatostatin
Pars intermedia, 163
biosynthesis
frogs
peptide processing
proopiomelanocortin
tunicamycin
Passive avoidance
ACTH-(4–9), 563
amnesia, 105, 809
analog ORG 2766, 563
cholecystokinin octapeptide, 105
cholecystokinin tetrapeptide amides, 809
circadian rhythm disruption, 563
$desglycinamide^9$-$(Arg^8)$-vasopressin, 563
retrograde amnesia, 563
Peptidase inhibitors, 225
catabolism
dynorphin
hypothalamus
neurotensin
Peptide susceptibility, 1015
biological activity
proteolysis
purification and characterization
thymopentin
thymopentin analogs
Peptide
acetylcholine, 431
N-acetyl-5-HTP-5-HTP amide, 995
ACTH, 1, 73, 201, 219, 237, 425, 591, 597, 651, 935, 1095, 1153
ACTH-(1–13), 87
ACTH-(1–24), 843
ACTH-(4–9), 563
adrenocorticotropin, 801
angiotensin II, 365, 373, 679, 1087
$[^{123}I]$-angiotensin II, 1021
angiotensin converting enzyme, 1071
arginine vasopressin, 105, 111, 267, 541, 569, 809, 989
atrial natriuretic polypeptide, 141, 241, 407, 573, 989
avian pancreatic polypeptide, s181
bombesin, 127, 557, 729, 815, 835, 969, 1079
bovine adrenal medulla Peptide E, 87
bovine parathyroid hormone peptide, 1131
bradykinin, 289, 1121
calcitonin, 729, 969, 1079
calcitonin gene-related peptide, 337, 1087
α-calcitonin gene-related peptide, 231
cardionatrin I, 407
β-casomorphin, 195
cholecystokinin, s197, 293, 587, 809
cholecystokinin octapeptide, 97, 105, 135, 473, 623, 723, 729, 809, 969, 973, 1079
corticotropin-releasing factor, 73, 79, 443, 465, 597, 935, 1095, 1153
cortisol, 73
crustacean hyperglycemic hormone, 397
C-terminal octapeptide, s37
delta sleep-inducing peptide, 1001, 1065
dermorphin, 247, 755
$desglycinamide^9$-$(Arg^8)$-vasopressin, 563
dynorphin, 225, 267, 711
$dynorphin_{1-17}$, 237
dynorphin A, 745
dynorphin A(1–8), 389
eledoisin, 297, 419, 1109
β-endorphin, 87, 119, 237, 267, 369, 437, 597, 603, 711, 1095
[α-N-acetyl]β-endorphin, 87
α-neo-endorphin, 389, 711, 977
β-neo-endorphin, 977
$D\text{-}Ala^2$-D-Leu-enkephalin, 449, 711
Leu-enkephalin, s229, 551, 741, 767, 1061
Met-enkephalin, s229, 259, 369, 419, 551, 767, 1061
$(Met^5)$enkephalin, 669
$Met^5$-enkephalin-$Arg^6$-$Gly^7$-$Leu^8$, 735
$D\text{-}Pen^{2,5}$-enkephalin, 711
epidermal growth factor, 45
$dET_2Tyr(ET)Orn^8$ vasotocin, 695
follicle stimulating hormone, s281
β-funaltrexamine, 711
galanin, 51
gastric inhibitory polypeptide, s75, s89, s121, s181
gastrin, 127
gastrin releasing peptide, 815
glicentin, s37
glucagon, s27, s37, s43, s69, s89, s109, 177, s181, 969, 1079
glucagon-29, s121, s249
glucagon-37, s37, s121, s249
glucagon-69, s37
gonadotropin-releasing hormone, 1101, 1137
growth hormone, 51, 393
growth hormone-releasing factor, s27, s49, s53, s89, 393
growth hormone-releasing factor (1–29), s69
growth hormone-releasing factor-40, 127
growth hormone-releasing hormone, s241
helodermin, s155, s237
helodermin, natural, s79
helodermin, synthetic, s79
N-hexanoyl-5-HTP-5-HTP amide, 995
hproHRng, 1137
α-human atrial natriuretic peptide, 33
human calcitonin gene-related peptide, 631

Numbers preceded by the letter "s" indicate items appearing in *VIP and Related Substances . . .* Suppl., Vol. 7, 1986.

human growth hormone-releasing factor, s175, s181
human pancreatic polypeptide, 1193
human pancreatic tumor growth hormone-releasing factor-40, s155
insulin, 177
kassinin, 297, 419, 835
Leumorphin, 87
limulin, 171
luteinizing hormone, s281, 1101
lysine-8-vasopressin, 539
Lys-Trp (Nps), 39
melanin-concentrating hormone, 941
α-melanocyte stimulating hormone, 1095
γ-melanotropin, 163
methionine-enkephalin, 885
motilin, 1193
MSH, 201, 437
α-MSH, 87, 843
neuraminidase, 171
neurokinin A, 297, 983
neuromedin B, 815, 835
neuromedin K, 1109
neuropeptide K, 1043
neuropeptide Y, 27, 55, 323, 341, 455, 623, 821, 1087, 1189
neuropeptide Y (2–36), 27
neuropeptide Y (16–36), 27
neuropeptide Y (19–36), 27
neuropeptide Y (25–36), 27
neurotensin, 225, 383, 431, 741, 1071, 1087
noradrenaline, 821
ORG 2766, 563
oxyntomodulin, s37, s89, s253, s257
oxytocin, 749
pentagastrin, s257
pepstatin A, 383
peptide histidine isoleucine, s69, s83, s89, 127, s155, s175, s181, s205, 283
peptide histidine isoleucine-27, s27
peptide histidine methionine, s7, s89, 717
physalaemin, 297, 419
β-preprotackykinin, 835
proctolin, 67
proGnRH(−3–13), 1137
prolyl-leucyl-glycinamide (MIP-1), 1007
proopiomelanocortin, 163, 437, 615, 659, 1197
ranatensin, 835
rat hypothalamus growth hormone releasing factor, s245
rat hypothalamus growth hormone releasing factor-29, s155
rat hypothalamus growth hormone releasing factor-43, s155
rimorphin, 87
secretin, s43, s61, s69, s89, s121, s155, s175, 177, s181, s229, s245, s267, 283, 357
somatocrinin, s165
somatostatin, 97, 127, 177, s181, s197, s221, s229, s257, s265, s287, 741, 749, 877, 1095
somatostatin-14, s261
somatostatin-28, s261, 953
speract, 491
substance K, 835, 1109
substance P, 171, s197, 297, 419, 557, 741, 761, 767, 835, 983, 1087, 1109
tachykinin, 297
thymopentin, 1015
thyrotropin-releasing hormone, 207
Tyr-Gly-Gly, 669
β-(Tyr$^{9}$)MSH$_{9-18}$
tyrosine-prolyl-leucyl-glycinamide, 1007
$^{125}$I-Tyr$^{11}$-somatostatin, 741
tuftsin, 961
urotensin I, 79
vasoactive intestinal peptide, s1, s7, s17, s27, s43, s53, s69, s79, s89, s101, s113, s121, 127, s129, s137, s147, s151, s155, s165, s169, s175, 177, s181, 183, s187, s193, s197, s201, s205, s221, s225, s237, s245, s267, s273, s279, 283, 413, 431, 717, 741
vasoactive intestinal peptide (10–28), 849
vasopressin, 91, 189, 741, 749
Peptide-amphiphile interactions, 1121
acidic lipids
bradykinin
mixed micelles of lipids and nonionic surfactant
sodium dodecyl sulfate
Peptide analogs, s43
conformational analysis
glucagon
secondary-tertiary structure
secretin
vasoactive intestinal peptide
Peptide biosynthesis, 615
amino-terminal fragment of POMC
intermediate lobe of pituitary
proopiomelanocortin
reversed phase HPLC
Peptide comparisons
adenohypophysis, s175
adenylate cyclase activity, s165
cerebral cortex, s175
cyclic AMP, s175
glycogenolysis, s175
human growth hormone-releasing factor, s175
methamphetamine treatment, 983
neurokinin A, 983
peptide histidine isoleucine, s175
secretin, s175
somatocrinin, s165
striatum, 983
substance P, 983
substantia nigra, 983
vasoactive intestinal peptide, s165, s175
Peptide-containing pathways, s205
cat/rat comparisons
peptide histidine isoleucine
sacral spinal cord
urinary bladder
vasoactive intestinal polypeptide
Peptide cross-listing and review, 497
peptide effects and actions
central nervous system
Peptide distribution, 941
brain, frogs
MCH-like immunoreactivity
melanin-concentrating hormone
Peptide effects and actions, 497
peptide cross-listing and review
central nervous system
Peptide histidine isoleucine
adenohypophysis, s175
bombesin-like immunoreactivity, 127
cat/rat comparisons, s205
cerebral cortex, s175
cyclic AMP, s175
gastrin release, 127
glycogenolysis, s175
growth hormone-releasing factor-40, 127
human growth hormone-releasing factor, s175
insulin release, s83
peptide comparisons, s175
peptide-containing pathway, s205
peptidergic neurotransmitter, 127
sacral spinal cord, s205
secretin, s175
somatostatin release, 127
structure-function relationship, s83
urinary bladder, s205
vasoactive intestinal polypeptide, 127, s175, s205
Peptide histidine methionine, 717
cosecretion
vasoactive intestinal peptide
VIP-producing tumors
Peptide immunoreactivity, 155
cryoprotectant
electron microscopy
immunocytochemistry
tissue morphology
Peptide interactions, s257
gastric acid secretion
oxyntomodulin
somatostatin
Peptide processing, 163
biosynthesis
frogs
pars intermedia
proopiomelanocortin
tunicamycin
Peptide receptor regulation, 849
adenylate cyclase regulation
HT29 cells
vasoactive intestinal peptide
Peptide receptors, 1109
CNS binding sites
neuropeptides
tachykinins
Peptidergic neurotransmitter, 127
bombesin-like immunoreactivity
gastrin release
growth hormone-releasing factor
peptide histidine isoleucine
somatostatin release
vasoactive intestinal peptide

---

Periaqueductal gray, 39
analgesia
Met-enkephalin content
Lys-Trp (Nps)
Pericardial organ, 67
crustaceans
proctolin
Perinatal period, 393
growth hormone-releasing factor
growth hormone secretion
Peripheral administration, 969
bombesin
calcitonin
cholecystokinin octapeptide
eating
glucagon
hyperglycemia
hyperinsulinemia
wolves
Phagocytosis, 961
C-reactive protein
neutrophils
signal sequences
synthetic peptides
tuftsin
Pharmacological characterization, 855
autoradiographic localization
guinea pig brain
species differences
substance P receptors
PHM identification, s7
electrotransfer
human neuroblastoma cell
immunoblot
VIP identification
Photoperiod/peptide interactions, 1079
body weight
bombesin
calcitonin
cholecystokinin octapeptide
food intake
glucagon
hamsters
Physiological chemoreceptor stimulus, 767
carotid body
enkephalin
rabbits
substance P
Physiological functions, 1165
adrenergic transmission
delta-sleep-inducing peptide
extra-sleep effects
natural occurrence
sleep
therapeutic potential
Pig heart, 821
coronary vasoconstriction
neuropeptide Y
stellate ganglia
sympathetic nerve stimulation
Pigment dispersion, 1
ACTH
grooming
melanotropins
structure activity
Pineal gland
adrenergic transmission, 1001
cyclic AMP, s193
delta sleep-inducing peptide, 1001
in vitro, 1001
in vivo, 1001
N-acetyltransferase activity, 1001
vasoactive intestinal polypeptide, s193
Pituitary
adrenocorticotropic hormone, 1153
corticotropin releasing factor, 935, 1153
cyclic AMP, 1153
cyclic AMP accumulation, 935
cyclic AMP potentiation, 935
dogfish sharks, 119
$\beta$-endorphin, 119
in vivo, 1153
posttranslational processing, 119
protein kinase C stimulation, 935
stress, 1153
Pituitary hormones, 659
glycosylation
opioid peptides
proteolytic processing
Plasma levels, 33
$\alpha$-human atrial natriuretic peptide
atria levels
heart failure
hypertension
POMC gene expression, 253
GABAergic regulation
hybridization techniques
Portacaval anastomosis, 645
adenylate cyclase
glucagon stimulations
secretin concentrations
Post-translational processing
anglerfish islet, 331
dogfish sharks, 119
$\beta$-endorphin, 119
glucagon biosynthesis, 331
pituitary, 119
preproglucagon, 331
Postural asymmetry, 551
enkephalins
flexion ratio
Precursor structure, s27
gene organization
glucagon superfamily
Pregnancy, s197
spinal cord peptide concentrations
Preload, 135
cholecystokinin octapeptide
eating
proglumide
satiety
Preovulatory prolactin surge, 541
arginine vasopressin
intraventricular administration
Preproglucagon, 331
anglerfish islet
glucagon biosynthesis
post-translational processing
Pressor responses, 597
adrenocorticotropin
$\beta$-endorphin
naloxone blockade
Proctolin, 67
crustaceans
pericardial organ
Progastrin, 689
amino acid sequences
dog/goat comparisons
micropurification techniques
Proglumide
cholecystokinin antagonists, 1159
cholecystokinin octapeptide, 135
CR 1409, 1159
eating, 135
pancreatitis, caerulein induced, 1159
pancreatitis, taurocholate induced, 1159
preload, 135
protective effect, 1159
satiety, 135
Prolyl-leucyl-glycinamide (MIP-1), 1007
aggression
defeat-induced analgesia
tyrosin-prolyl-leucyl-glycinamide (Tyr-MIF-1)
Proopiomelanocortin
amino-terminal fragment of POMC, 615
arcuate nucleus, 1197
biosynthesis, 163
endorphinic neurons, 1197
frogs, 163
hypothalamus, 1197
intermediate lobe of pituitary, 615
neuronal contact, 1197
pars intermedia, 163
peptide biosynthesis, 615
peptide processing, 163
reversed phase HPLC, 615
tuberoinfundibular dopaminergic neurons, 1197
tunicamycin, 163
Prostaglandin, 289
acetylcholine release
bradykinin
guinea pigs
myenteric plexus
Protective effect, 1159
cholecystokinin antagonists
CR 1409
pancreatitis, caerulein induced
pancreatitis, taurocholate induced
proglumide
Protein kinase C stimulation, 935
cAMP accumulation
cAMP potentiation
corticotropin releasing factor
pituitary
Proteins, 481
dihydroxyalkyl bonded silica support
high peformance liquid chromatography
Proteolysis, 1015
biological activity
peptidase susceptibility
purification and characterization
thymopentin
thymopentin analogs
Proteolytic processing, 659
glycosylation
opioid peptides
pituitary hormones
Pulmonary artery, s225
animal models


Numbers preceded by the letter "s" indicate items appearing in *VIP and Related Substances . . .* Suppl., Vol. 7, 1986.

endothelium
vascular relaxation
vasoactive intestinal polypeptide
Pulsatile secretion, 219
adrenocorticotropin
ultradian rhythm
Purification, s17
amino acid sequences
animal models
vasoactive intestinal peptide
Purification and characterization
biological activity, 1015
elasmobranches, s21
peptidase susceptibility, 1015
proteolysis, 1015
thymopentin, 1015
thymopentin analogs, 1015
vasoactive intestinal peptide, s21

Quantitative autoradiography, 1021
[$^{125}$I]-angiotensin II
angiotensin II receptors
blood pressure regulation
spontaneously hypertensive rats
$^{3}$H-Quinuclidinyl benzilate, 21
cholinergic muscarinic receptor binding
in vitro
melanotropin release inhibiting factor
striatum
QNB binding, 425
acetylcholine
ACTH
in vitro
muscarinic receptors

Rabbits
analgesia, 1095
carotid body, 767
complementary GnRH, 1137
complementary GnRH antiserum, 1137
cytosol, 741
eating, 745
enkephalin, 767
GnRH receptors, 1137
gonadotropin-releasing hormone, 1137
mRNA, 1137
neuropeptides, 741, 1095
opioids, 745
physiological chemoreceptor stimulus, 767
receptor recognition, antiserum, 1137
renal papilla, 741
somatostatin binding sites, 741
stress, pain induced, 1095
substance P, 767
Radioautographic labeling, 351
$^{125}$I-FK 33-824
opioid receptors
Radioimmunoassay, 365
angiotensin II
octadecyl cartridges
Rat hypothalamic growth hormone-releasing factor, s245
acinar cells
exocrine pancreatic secretion
in vivo
Rat ovaries, 267
arginine-vasopressin
dynorphin
$\beta$-endorphin
strain differences
Receptivity, 581
inhibitory actions
lordosis
$\alpha$-melanocyte stimulating hormone
Receptor activity, s155
cAMP
gastric acid secretion
secretin
structure-activity relationship
Receptor mediated endocytosis, s137
binding sites
human colonic adenocarcinoma cells
monoclonal antibodies
vasoactive intestinal peptide
Receptor recognition, antiserum, 1137
complementary GnRH
complementary GnRH antiserum
GnRH receptors
gonadotropin-releasing hromone
mRNA
rabbits
Receptor specificity, 293
cerebellum
cerebral cortex
cholecystokinin binding
species differences
Reflex contractions, 323
neuropeptide Y
opioid interactions
urinary bladder
Regional distribution, 669
depolarized slice formation
lesion effects
opioid peptide release
Renal effects, 865
adenylate cyclase activity
kidneys, rats
secretin receptors
Renal papilla, 741
cytosol
neuropeptides
rabbits
renal papilla
somatostatin binding sites
Renin secretion, 91
antidiuretic activity
dogs
vasopressin
Respiration, 907
alcohol
cardiovascular responses
dependence
drinking
eating
endogenous opiates, review
immune system
learning
locomotor activity
memory
mental illness
seizures
sex differences
social behavior
stress
stroke
thermoregulation
tolerance
Respiration stimulation, 491
cyclic nucleotide
sea urchin eggs
speract
Respiratory stimulation, 207
cats
central nervous system
thyrotropin-releasing hormone
Retrograde amnesia, 563
ACTH-(4–9)
analog Org 2766
circadian rhythm disruption
desglycinamide$^{9}$-(Arg$^{8}$)-vasopressin
passive avoidance
Reversed phase HPLC, 615
amino-terminal fragment of POMC
intermediate lobe of pituitary
peptide biosynthesis
proopiomelanocortin
Route of administration
blood pressure effects, 539
dose-effect relationship, s281
growth hormone, s281
human growth hormone-releasing factor, s281
human studies, males, s281
lysine-8-vasopressin, 539

Sacral spinal cord, s205
cat/rat comparisons
peptide-containing pathway
peptide histidine isoleucine
urinary bladder
vasoactive intestinal polypeptide
Satiety, 135
cholecystokinin octapeptide
eating
preload
proglumide
Sea urchin eggs, 491
cyclic nucleotide
respiration stimulation
speract
Secondary-tertiary structure, s43
conformational analysis
glucagon
peptide analogs
secretin
vasoactive intestinal peptide
Secretin
adenohypophysis, s175
cerebral cortex, s175
conformational analysis, s43
cyclic AMP, s155, s175
dog duodenal mucosal explants, s229
gastric acid secretion, s155
glucagon, s43
glycogenolysis, s175
human growth hormone-releasing factor, s175
human pancreatic cancer cell line, s267

in vitro, s229
neurohormonal regulation, s229
peptide analogs, s43
peptide comparisons, s175
peptide histidine isoleucine, s175
receptor activity, s155
secondary-tertiary structure, s43
structure-activity relationship, s155
vasoactive intestinal peptide, s43, s175, s267
Secretin analogs, s61
dog/rat comparisons
structure-activity relationship
Secretin concentration, 645
adenylate cyclase
glucagon stimulations
portacaval anastomosis
Secretin receptors, 865
adenylate cyclase activity
kidneys, rats
renal effects
Secretin secretion, 357
cyclic nucleotides
in vitro
Seizures, 907
alcohol
cardiovascular responses
dependence
drinking
eating
endogenous opiates, review
immune system
learning
locomotor activity
memory
mental illness
respiration
sex differences
social behavior
stress
stroke
thermoregulation
tolerance
Serotonin metabolism, 183
suprachiasmatic area
vasoactive intestinal peptide
Sex differences, 907
alcohol
cardiovascular responses
dependence
drinking
eating
endogenous opiates, review
immune system
learning
locomotor activity
memory
mental illness
respiration
seizures
social behavior
stress
stroke
thermoregulation
tolerance
Sheep, 413
catecholamine secretion
fetal adrenal gland
fetal twins
VIP distribution
Shock induced amnesia, 11
avoidance
discrimination learning
memory
$\beta$-(Tyr$^0$)MSH$_{9-18}$
Signal sequences, 961
C-reactive protein
neutrophils
phagocytosis
synthetic peptides
tuftsin
Sleep, 1165
adrenergic transmission
delta-sleep-inducing peptide
extra-sleep effects
natural occurrence
physiological functions
therapeutic potential
Smooth muscle relaxation, s201
cats
myometrium
vasoactive intestinal polypeptide
Social behavior, 907
alcohol
cardiovascular responses
dependence
drinking
eating
endogenous opiates, review
immune system
learning
locomotor activity
memory
mental illness
respiration
seizures
sex differences
stress
stroke
thermoregulation
tolerance
Sodium dodecyl sulfate, 1121
acidic lipids
bradykinin
mixed micelles of lipids and nonionic surfactant
peptide-amphiphile interactions
Sodium nitroprusside, 231
$\alpha$-calcitonin gene-related peptides
coronary vasodilators
species differences
Solubilization, s147
CHAPS
guinea pig lung
vasoactive intestinal peptide receptors
Somatocrinin, s165
adenylate cyclase activity
peptide comparisons
vasoactive intestinal peptide
Somatostatin
cholecystokinin octapeptide, 97
discrete brain nuclei, 749
dopamine receptors, 97
electrophysiologic effects, s265
gastric acid secretion, s257
human studies, s265
in vitro release, 97
lesions, monosodium-L-glutamate, 749
neonatal MSG treatment, 749
neurotoxin effects, 749
oxyntomodulin, s257
oxytocin, 749
paroxysmal supraventricular tachycardia, s265
peptide interactions, s257
striatal amino acids, 97
test meal, s287
type I diabetes, s287
vasopressin, 749
Somatostatin-14, s261
endocrine pancreatic cell line
somatostatin-28
Somatostatin-28, s261
endocrine pancreatic cell line
somatostatin-14
Somatostatin binding sites, 741
cytosol
neuropeptides
rabbits
renal papilla
Somatostatin distribution, 877
human forebrain
immunocytochemistry
Somatostatin levels, 771
baboons
cholecystokinin octapeptide
somatostatin-like immunoreactivity
Somatostatin-like immunoreactivity, 771
baboons
cholecystokinin octapeptide
somatostatin levels
Somatostatin receptors, 953
binding sites
calcium ions
pancreatic ions
Somatostatin release, 127
bombesin-like immunoreactivity
gastrin release
growth hormone-releasing factor-40
peptide histidine isoleucine
peptidergic neurotransmitter
vasoactive intestinal peptide
Species differences
autoradiographic localization, 855
$\alpha$-calcitonin gene-related peptide, 231
cerebellum, 293
cerebral cortex, 293
cholecystokinin binding, 293
coronary vasodilators, 231
guinea pig brain, 855
pharmacological characterization, 855
receptor specificity, 293
sodium nitroprusside, 231
substance P receptors, 855
Specificities, s89
ligand binding sites
VIP family peptides
Speract, 491
cyclic nucleotide
respiration stimulation
sea urchin eggs
Spinal cord peptide concentrations, s197
pregnancy
Spinal release, 369
aprotinin


---

bacitracin
β-endorphin
Met-enkephalin
inhibitory effect
Spontaneously hypertensive rats
[$^{125}$I]-angiotensin II, 1021
angiotensin II receptors, 1021
blood pressure, 977
blood pressure regulation, 1021
endogenous opioids, 977
α-neo-endorphin, 977
β-neo-endorphin, 977
heart rate, 977
naltrexone, 977
quantitative autoradiography, 1021
Stellate ganglia, 821
coronary vasoconstriction
neuropeptide Y
pig heart
sympathetic nerve stimulation
Strain differences
angiotensin II, 373
arginine-vasopressin, 267
$^{3}$H-arginine$^{8}$-vasopressin receptors, 701
atrial natriuretic factor, 373
binding sites, 701
blood pressure, 373
drinking, 373
dynorphin, 267
β-endorphin, 267
rat ovaries, 267
up-regulation, 701
Stress
adrenocorticotropic hormone, 1153
alcohol, 907
analgesia, 1095
anterior pituitary lobe, 603
cardiovascular responses, 907
corticotropin-releasing factor, 603, 1153
cyclic AMP, 1153
dependence, 907
drinking, 907
eating, 907
endogenous opiates, review, 907
β-endorphin, 603
immune system, 907
in vivo, 1153
learning, 907
β-lipotropin, 603
locomotor activity, 907
memory, 907
mental illness, 907
neuropeptides, 1095
pituitary, 1153
rabbits, 1095
respiration, 907
seizures, 907
sex differences, 907
social behavior, 907
stroke, 907
thermoregulation, 907
tolerance, 907
Striatal amino acids, 97
cholecystokinin octapeptide
dopamine receptors
in vitro release
somatostatin
Striatal neurons, s187
cyclic AMP levels
vasoactive intestinal polypeptide
Striatum
cholinergic muscarinic receptor binding, 21
in vitro, 21
melanotropin release inhibiting factor, 21
methamphetamine treatment, 983
neurokinin A, 983
peptide comparisons, 983
$^{3}$H-quinuclidinyl benzilate, 21
substance P, 983
substantia nigra, 983
Stroke, 907
alcohol
cardiovascular responses
dependence
drinking
eating
endogenous opiates, review
immune system
learning
locomotor activity
memory
mental illness
respiration
seizures
sex differences
social behavior
stress
thermoregulation
tolerance
Structure activity, 1
ACTH
grooming
melanotropins
pigment dispersion
Structure-activity relationship
cAMP, s155
conformation, s69
design strategies, s49
dog/rat comparisons, s61
gastric acid secretion, s155
glucagon analogs, s69
glycogenolytic activity, s69
growth hormone-releasing factor, s49
receptor activity, s155
secretin, s155
secretin analogs, s61
synthetic analogs, s49
Structure and expression, s1
human tumor
vasoactive intestinal peptide gene
Structure-binding relationship, s181
binding sites
cerebral cortex
vasoactive intestinal peptide
Structure-function relationship
blood flow, s237
dogs, s237
helodermin, s237
insulin release, s83
peptide histidine isoleucine, s83
vasoactive intestinal polypeptide-like effect, s237
Substance K, 835
bombesin
nociception
substance P
Substance P
antinociception, 419
behavioral alterations, 557
bombesin, 557, 835
carotid body, 767
enkephalin, 767
Met-enkephalin, 419
5-hydroxytryptamine secretion, 171
limulin, 171
mast cells, 171
methamphetamine treatment, 983
neuraminidase, 171
neurokinin A, 983
nociception, 835
nociceptive mechanisms, 557
peptide comparisons, 983
physiological chemoreceptor stimulus, 767
rabbits, 767
striatum, 983
substance K, 835
substantia nigra, 983
tachykinins, 419
Substance P fibers, 899
choline acetyltransferase
immunocytochemistry
nervus terminalis
vasoactive intestinal polypeptide
Substance P immunoreactivity, 761
guinea pig myenteric plexus
synaptosomes
Substance P receptors, 855
autoradiographic localization
guinea pig brain
pharmacological characterization
species differences
Substantia nigra, 983
methamphetamine treatment
neurokinin A
peptide comparisons
striatum
substance P
Sulfated CCK-8, 473
CCK-8 stimulation
desensitization
in vitro
non-sulfated CCK-8
ventromedial hypothalamus
Suprachiasmatic area, 183
serotonin metabolism
vasoactive intestinal peptide
Sweat secretion regulation, s151
binding sites
human sweat glands, isolated
vasoactive intestinal peptide
Sympathetic nerve stimulation, 821
coronary vasoconstriction
neuropeptide Y
pig heart
stellate ganglia
Sympathoadrenal system, 569
arginine vasopressin
drug interaction
hypertension
tachycardia
Synaptosomes, 761
guinea pig myenteric plexus
substance P immunoreactivity

Synthetic analogs, s49
design strategy
growth hormone-releasing factor
structure-activity relationship
Synthetic peptides, 961
C-reactive protein
neutrophils
phagocytosis
signal sequences
tuftsin
Systemic administration, 995
analgesia
5-hydroxytryptophan synthetic peptides
jump threshold
pain
tail-flick test
tolerance

Tachycardia
arginine vasopressin, 569
cardiovascular response, 1087
dose-dependent effects, 1087
drug interaction, 569
epicardial application, 1087
guinea pigs, 1087
hypertension, 569
neurotensin, 1087
sympathoadrenal system, 569
Tachykinin-like peptides, 297
central nervous system
chromatographic studies
immunohistochemistry
lampreys
Tachykinins
antinociception, 419
central nervous system, 1043
CNS binding sites, 1109
Met-enkephalin, 419
immunoreactivity, 1043
neuropeptide K, 1043
neuropeptides, 1109
peptide receptors, 1109
substance P, 419
Tail-flick test, 995
analgesia
5-hydroxytryptophan synthetic peptides
jump thresholds
pain
systemic administration
tolerance
Test meal, s287
somatostatin
type I diabetes
Therapeutic potential, 1165
adrenergic transmission
delta-sleep-inducing peptide
extra-sleep effects
natural occurrence
physiological functions
sleep
Thermoregulation, 907
alcohol
cardiovascular responses
dependence
drinking
eating
endogenous opiates, review
immune system
learning
locomotor activity
memory
mental illness
respiration
seizures
sex differences
social behavior
stress
stroke
tolerance
Thymopentin, 1015
biological activity
peptidase susceptibility
proteolysis
purification and characterization
thymopentin analogs
Thymopentin analogs, 1015
biological activity
peptidase susceptibility
proteolysis
purification and characterization
thymopentin
Thyrotropin-releasing hormone, 207
cats
central nervous system
respiratory stimulation
Tissue morphology, 155
cryoprotectant
electron microscopy
immunocytochemistry
peptide immunoreactivity
Tissue specificity, s37
biological significance
enteroglucagon
gastric acid secretion
Tolerance
alcohol, 907
analgesia, 995
cardiovascular responses, 907
dependence, 907
drinking, 907
eating, 907
endogenous opiates, review, 907
5-hydroxytryptophan synthetic peptides, 995
immune system, 907
jump thresholds, 995
learning, 907
locomotor activity, 907
memory, 907
mental illness, 907
pain, 995
respiration, 907
seizures, 907
sex differences, 907
social behavior, 907
stress, 907
stroke, 907
systemic administration, 995
tail-flick test, 995
thermoregulation, 907
Tree shrews, 873
adrenal gland
atrial natriuretic peptide binding sites
Tuberoinfundibular dopaminergic neurons, 1197
arcuate nucleus
endorphinic neurons
hypothalamus
neuronal contact
proopiomelanocortin
Tuftsin, 961
C-reactive protein
neutrophils
phagocytosis
signal sequences
synthetic peptides
Tunicamycin, 163
biosynthesis
frogs
pars intermedia
peptide processing
proopiomelanocortin
Type I diabetes, s287
somatostatin
test meal
$\beta$-(Tyr$^0$)MSH$_{9-18}$, 11
avoidance
discrimination learning
memory process
shock induced amnesia
Tyrosinase, 437
cyclic AMP
melanoma cells
Tyrosine hydroxylase, 783
differential sensitivity
immunocytochemistry
monosodium glutamate
neurotoxic effects
opiocortin
Tyrosine-prolyl-leucyl-glycinamide (Tyr-MIF-1), 1007
aggression
defeat-induced analgesia
prolyl-leucyl-glycinamide (MIF-1)

Ultradian rhythm, 219
adrenocorticotropin
pulsatile secretion
Up-regulation, 701
$^3$H-arginine$^8$-vasopressin receptors
binding sites
strain differences
Urinary bladder
cat/rat comparisons, s205
neuropeptide Y, 323
opioid interactions, 323
peptide-containing pathway, s205
peptide histidine isoleucine, s205
reflex contractions, 323
sacral spinal cord, s205
vasoactive intestinal polypeptide, s205
Urotensin I, 79
central nervous system
corticotropin-releasing factor
fish
immunoreactivity

Vagal nerves, 431
coronary vessels

---

Numbers preceded by the letter "s" indicate items appearing in *VIP and Related Substances . . .* Suppl., Vol. 7, 1986.

guinea pig isolated heart
neurotensin
Vagotomy, 587
capsaicin
cholecystokinin octapeptide
locomotor activity
Vascular activity, 1131
arginine modification
bovine parathyroid hormone peptide
conformational changes
hydrophobicity
hypotensive response
methionine oxidation
Vascular relaxation, s225
animal models
endothelium
pulmonary artery
vasoactive intestinal polypeptide
Vasoactive intestinal peptide
adenohypophysis, s175
adenylate cyclase, s53
adenylate cyclase activity, s165
adenylate cyclase regulation, 849
amino acid sequences, s17
animal models, s17, s225
asthma, s279
binding sites, s137, s151, s181
blood flow, s169
blood levels, s221
bombesin-like immunoreactivity, 127
bronchodilation, s279
cat/rat comparisons, s205
cats, s201
cerebral cortex, s169, s175, s181
choline acetyltransferase, 899
conformational analysis, s43
cosecretion, 717
cyclic AMP, s175, s187, s193
dogs, s221
dopaminomimetics, s221
effector mechanisms, s101
elasmobranches, s21
endothelium, s225
energy metabolism, s169
exocrine pancreas, s101
gastric inhibitory peptide, s121
gastric receptors, s121
gastrin release, 127
GRF analogs, s53
glucagon, s43
glucagon-29, s121
glucagon-37, s121
glycogenolysis, s175
growth hormone-releasing factor, 127
hepatectomy, s273
HT29 cells, 849
human colonic adenocarcinoma cells, s137
human gastric cancer cell line, s121
human growth hormone-releasing factor, s175
human pancreatic cancer cell line, s267
human studies, s279
human sweat glands, isolated, s151
immunocytochemistry, 899
intercellular communication, s169
intestinal epithelial cells, s273
liver, s101
liver plasma membranes, s273
low affinity binding, 177
lymphoid cells, 177
monoclonal antibodies, s137
myometrium, s201
nervus terminalis, 899
neuronal activity, s169
peptide analogs, s43
peptide comparisons, s165, s175
peptide-containing pathway, s205
peptide histidine isoleucine, 127, s175, s205
peptide histidine methionine, 717
peptide receptor regulation, 849
peptidergic neurotransmitter, 127
pineal gland, s193
pulmonary artery, s225
purification, s17
purification and characterization, s21
receptor mediated endocytosis, s137
sacral spinal cord, s205
secondary-tertiary structure, s43
secretin, s43, s175, s267
serotonin metabolism, 183
smooth muscle relaxation, s201
somatocrinin, s165
somatostatin, 127
striatal neurons, s187
structure-binding relationship, s181
substance P fibers, 899
suprachiasmatic area, 183
sweat secretion regulation, s151
urinary bladder, s205
vascular relaxation, s225
VIP-producing tumors, 717
Vasoactive intestinal peptide distribution, 413
catecholamine secretion
fetal adrenal gland
fetal twins
sheep
Vasoactive intestinal peptide family peptides, s89
ligand binding sites
specificities
Vasoactive intestinal peptide gene, s1
human tumor
structure and expressions
Vasoactive intestinal peptide identification, s7
electrotransfer
human neuroblastoma cell
immunoblot
PHM identification
Vasoactive intestinal peptide processing, s129
human colon carcinoma cells
internalization
Vasoactive intestinal peptide-producing tumors, 717
cosecretion
peptide histidine methionine
vasoactive intestinal peptide
Vasoactive intestinal peptide receptor activity, s113
HT29-18 cells
intestinal development
Vasoactive intestinal peptide receptors
adenylate cyclase, s79
autoradiographic localization, 283
CHAPS, s147
guinea pig lung, s147
glycoproteins, 791
helodermin, natural, s79
helodermin, synthetic, s79
in vitro, 283
liver, s79
mammalian lungs, 791
solubilization, s147
Vasoactive intestinal polypeptide-like effects, s237
blood flow
dogs
helodermin
structure-function relationship
Vasodilator, 465
corticotropin releasing-hormone
monkeys, cynomolgus
Vasopressin
antidiuretic activity, 91
attention, 189
corticotropin-releasing factor, 891
discrete brain nuclei, 749
dogs, 91
dual staining immunocytochemistry, 891
electrophysiological signs, 189
human studies, twins, 189
lesions, monosodium-L-glutamate, 749
neonatal MSG treatment, 749
neurotoxin effects, 749
oxytocin, 749
paraventricular neurons, 891
renin secretion, 91
somatostatin, 749
Ventromedial hypothalamus, 473
CCK-8 stimulation
desensitization
in vitro
non-sulfated CCK-8
sulfated CCK-8
Vertebrate brain GnRH, 827
amphibian brain
chicken GnRH II
GnRH structure

Wolves, 969
bombesin
calcitonin
cholecystokinin octapeptide
eating
glucagon
hyperglycemia
hyperinsulinemia
peripheral administration

X-organ sinus gland, 397
biosynthesis
crustacean hyperglycemic hormone

---

Numbers preceded by the letter "s" indicate items appearing in *VIP and Related Substances . . .* Suppl., Vol. 7, 1986.

# AUTHOR INDEX


Abadie, B., s137
Abraham, K. I., 481
Accary, J. P., s241
Akil, H., 603
Amar, S., 1071
Anand, P., s205
Andersen, A. C., 941
Andrews, P. C., 147, 331
Annese, V., s287
Antakly, T., 1147
Aral, I. A., 111
Argiolas, A., 591
Arilla, E., s273, 741
Arimura, A., 1137
Arnedo, A., 419
Arnerić, S. P., 97
Arold, H., 195
Audhya, T., 1015
Audousset-Puech, M.-P., s253, s257
Autelitano, D. J., 267

Bachelard, H., 27, 431, 1087
Bacher, J., 465
Baertschi, A. J., 935
Bakalkin, G. Ya., 551
Bani, M., 1159
Banks, W. A., 497
Barabé, J., 1087
Barchas, J. D., 119, 1043
Barksdale, C. M., 219
Barrit, M.-C., 183
Barth, A., 195
Bartness, T. J., 1079
Bataille, D., s37, s121, s155, s249, s253, s257
Bauer, F. E., 5
Baxter, J. H., 407
Beaudet, A., 351
Bell, G. I., s27
Bellocci, F., s265
Bender, H., 127
Bennett, H. P. J., 615
Bennett-Clarke, C. A., 877
Berardo, P. V., 541
Bernier, S., 587
Berrettini, W. H., 455
Berry, R. W., 637
Bertolini, A., 843
Bhargava, H. N., 21
Bhathena, S. J., 1061
Bianchini, G., s265, s287
Bickel, M., s61
Biot-Laporte, S., s281
Bishop, J. F., 437, 835
Blank, M. A., 5, s205
Bloom, F. E., 213
Bloom, S. R., 5, s205, 383
Bluthé, R.-M., 213
Bockaert, J., s187
Bodanszky, A., s43
Bodanszky, M., s43
Bodere, H., s121
Bodnar, R. J., 111, 995
Bodner, M., s1
Boissel, J. P., s281
Bollók, I., 11
Bonato, C., 689
Born, J., 189
Borrell, J., 237
Borson, F., s281
Bortolotti, F., 247
Bosshard, A., s197
Boudouresque, F., 393
Bourbonnais, Y., 659
Brodin, E., 297
Brownfield, M. S., 219
Buchta, R., 961
Buck, S. H., 1109
Buda, C., 801
Bueno, L., 73
Buller, A. L., 207
Burcher, E., 1109
Buscics, A., 761
Bylund, D. B., 849

Calvo, J. R., 177
Camus, J. C., s53, s79, s109
Cann, J. R., 1121
Cantin, M., 241, 573, 989
Carlen, P. L., 1193
Carlquist, M., s75
Carnes, M., 219
Carrillo, A. J., 541
Cassey, C. A., 357
Cereda, R., 1159
Chabot, J.-G., 45
Chang, D., 33
Chang, J. K., 33
Chang, T.-M., 357
Chariot, J., s245
Charlton, C. G., 865
Chartier, L., 241
Chastre, E., s113, s121
Chatelain, P., s281
Chayvialle, J. A., s197, s281
Checler, F., 1071
Chery-Croze, S., s197
Cheung, C. Y., 413
Chey, W. Y., s229
Ching, M., 705
Chistè, R., 1159
Christofides, N. D., 5
Christophe, J., s7, s53, s79, s101, s109, s237, 645
Chrousos, G. P., 465
Ciarcia, G., 1101
Classen, M., 127, 885
Claustrat, B., s281
Clémente, F., s261, s267
Clerc, P., s267
Clough, R. W., 155
Cocchi, D., 1011
Cohen, R., s281
Coleman, J. W., 171
Conn, P. M., 459
Conte-Devolx, B., 393
Correa, F. M. A., 679
Cotroneo, P., s265, s287
Coy, D. H., s49, s53, s69, s109, 459, 791, 1137
Craig, R. K., 231
Crine, P., 659
Cronin, M. J., 935
Cuello, A. C., 297

Dam, T.-V., 855
Dantzer, R., 213
Das, S., 21
de Castiglione, R., 755
De Ceballos, M. L., 39
De Felipe, M. C., 419
de Fontaine, S., 645
De Gennaro, V., 1011
de Graaf, J. S., 425
de Graan, P. N. E., 1
Dehaye, J.-P., s101
De La Tour, J., s245
De Lean, A., 573
Del Rio, J., 39, 419
Demeneix, B. A., 253
Demura, H., 141
De Neef, P., s53, s79, s109, 645
DePaolo, L. V., 541
Depigny, C., s37
Deschepper, C. F., 365
Devi, L., 87
De Wied, D., 563
Diaz-Juarez, J. L., s273
Dickinson, K. E. J., 791
Dimaggio, D. A., 455
Dimaline, R., s21
Dinoso, V. P., Jr., 357
Dircksen, H., 67
Dockray, G. J., 735
Dorsa, D. M., 61, 701
Dorsett, J. A., 289
Dray, A., 323
Drouin, J., 1147
Du, B.-H., s17
Du, X. L., 973
Dubois, M. P., 801
Dubrasquet, J. M., s257
Dubrasquet, M., s37, s241
Dunn, A. J., 651
Dupin, P., s281
Dutour, A., 393

Eberle, A. N., 1, 941
Elashoff, J., 723
El Battari, A., s137
Emami, S., s113, s121
Eng, J., s17, 689
Esteve, J. P., 953
Estilow, S., 775
Estival, A., s261
Evans, C. J., 119

Fagot-Revurat, P., s261, s267
Fahrenkrug, J., 15, s181, s201, 717
Fantini, J., s137
Farah, J. M., Jr., 437
Faudon, M., 183
Faull, K. F., 119
Fehm, H. L., 189
Fehm-Wolfsdorf, G., 189
Fekete, M., 563
Ferri, G.-L., 735
Ferry, S., s281
Feuilloley, M., 573
Fidone, S., 767
Fields, M., 1061
Figlewicz, D. P., 61, 771
Finkel, M. S., 865
Fioramonti, J., 73
Fisher, A. W. F., 79
Forman, L. J., 775
Forssmann, W.-G., 297
Franco-Cereceda, A., 821
Fratta, W., 591
Fridkin, M., s1, 961
Fuchs, E., 873
Fujii, N., 631
Fujimoto, J. M., 369
Fujita, T., s83
Funakoshi, S., 631
Funder, J. W., 267

Gaillard, R. C., s175
Gallucci, W. T., 465
Gammeltoft, S., 181
Gannon, M., 1147
Ganong, W. F., 365
Ganzetti, I., 1011
Garbers, D. L., 491
Garcia, R., 241
Garcia-Lopez, M. T., 39
Garry, P., s281
Garzón, J., 623
Gehlert, D. R., 1021
Genest, J., 241, 989
George, S. R., 277
Gespach, C., s113, s121, s155
Gessa, G. L., 591
Ghirlanda, G., s265, s287
Gibb, J. W., 983
Gibbs, J., 135
Gibson, S. J., s205
Giesecke, A. H., Jr., 1095
Giles, T. D., 259
Gillis, R. A., 207
Girard, J., 1
Girard, P., s281
Giros, B., 669
Gispen, W. H., 1
Goberna, R., 177
Goffette, D., s245
Goiny, M., s221
Goldstein, A., 87
Goldstein, G., 1015
Gonzalez-Muñiz, R., 39
Görcs, T. J., 1137
Gorzalka, B. B., 581
Gosnell, B. A., 745
Gottschall, P. E., 1137
Gozes, I., s1
Graf, M. V., 1001, 1165
Gray, T. S., 341


---

Numbers preceded by the letter "s" indicate items appearing in *VIP and Related Substances . . .* Suppl., Vol. 7, 1986.

Greco, A. V., s265, s287
Gregoire, A., s7
Greiner, F., 147
Grillner, S., 297
Grino, M., 393
Gros, C., 669
Gryson, K. A., 293
Guaza, C., 237
Guerrero, J. M., 177
Guidobono, F., 315
Guillaume, V., 393
Günther, O., 539
Gutkowska, J., 241, 989

Hacker, G. W., 5
Haegele, K. D., 253
Haldar, J., 111
Hamosh, P., 207
Handelmann, G. E., 865
Hansen, B., s201
Hanson, G. R., 767, 983
Harris, R. B., 407
Hartrodt, B., 195
Hashimoto, Y., s83
Heavner, G. A., 1015
Heiman, M. L., s49
Heinz-Erian, P., s151
Hejblum, G., s129
Helke, C. J., 1109
Hermann, G. E., 695
Herranz, R., 39
Hertal, H., 969
Hery, F., 183
Hery, M., 183
Higashida, T., 141
Hirst, M., 1007
Hoffman, G. E., 155
Hökfelt, T., 297
Höllt, V., 253, 623
Holman, J. J., 231
Holtman, J. R., Jr., 207
Holzer, P., 761
Holzwarth, M. A., 413
Honda, T., 141
Hong, B.-S., 1131
Hoshino, M., s237
Huang, Q., 171
Hui Bon Hoa, D., s129
Hulmes, J. D., 689
Hunt, T. R., 61
Hunter, J., 1043
Hurd, R. W., 651

Ikeda, H., 61
Inagami, T., 141, 373
Inoue, Y., s193
Inyama, C., s205
Israel, A., 679
Itoh, S., 105, 805
Iwanaga, T., s83

Jacobowitz, D. M., 337, 209, 1029
Janin, M., 801
Januszewicz, P., 989
Jarrousse, C., s37, s253
Jegou, S., 941
Jenks, B., 163
Jennes, L., 459
Jensen, R. T., 865
Jimenez, J., 177
Johnston, C. A., 749
Jones, L., 767
Jones, S. B., 849
Joseph, S. A., 783, 877, 891
Jouvet, M., 801

Kadowaki, M., s237
Kaku, K., s193
Kalin, N. H., 219
Kalivas, P., 587
Kaneko, T., s193
Kant, G. J., 1153
Karpiak, S. E., 995
Kastin, A. J., 497, 907, 1165
Katagiri, T., s205
Kato, I., s83
Katsuura, G., 105, 809
Kavaliers, M., 449, 1007
Kehrer, P., s175
Keller, R., 67
Kemp, D. E., s187
Kergoat, M., s75
Kertesz, M., 277
Kervran, A., s37
Kidd, A. M., 225
King, J. A., 827, 1101
King, R. C., 369
Kishida, S., s237
Kitabgi, P., 1071
Kitahama, K., 801
Kley, N., 253
Kobylyansky, A. G., 551
König, W., s61
Koob, G. F., 213
Kordower, J. H., 111
Korman, L. Y., 815
Kovács, G. L., 539
Kow, L.-M., 473
Krieg, R. J., Jr., 705
Kroon, D. J., 1015
Kubota, E., s225
Kurihara, M., 679
Kurimoto, F., 141
Kyrkouli, S. E., 1189

Lambert, M., s101
Lampert, S., 1189
Lance, V. A., s49, s69, 1101
Larose, P., 989
Larsen, J.-J., s201
Lavigne, J.-P., 1147
Lavy, A., s229, 357
Lazarus, L. H., 297
Leboulenger, F., 573
Lebrun, C., 213
Lederis, K., 79
Lee, Y. C., 383
Lehy, T., s241
Leibowtiz, S. F., 1189
Lembeck, F., 761
Lemieux, E., 659
Le Moal, M., 213
Lent, S., 219
Leroux, P., 941
Letter, A. A., 983
Levin, E. R., 977
Levine, A. S., 729, 969, 1079
Lewin, M. J. M., s165, s241
Lewis, J., 603
Li, C., 973
Liang, J. N., 1131
Liddle, R. A., 723
Liebmann, C., 195
Lippe, I., Th., 761
Lipton, J. M., 745, 1095
Llorens-Cortes, C., 669
Loeffler, J. Ph., 253
Lolait, S. J., 267
Loras, B., s281
Lorenz, R. G., 119
Loriaux, D. L., 465
Lowe, R. F., 259
Luis, J., s137
Lumb, B. M., s205
Lundberg, J. M., 821
Lutzenberger, W., 189

McCann, S. M., 51
McChesney, D. J., 293
McDermott, J. R., 225
McDonald, J. K., 147

Maeda, A., 631
Magistretti, P. J., s169, S175
Magnuson, D. J., 341
Majeed, N. H., 711
Makk, G., 119
Makovec, F., 1159
Maletti, M., s75
Manaka, H., s83
Mann, P. E., 995
Manto, A., s287
Marastoni, M., 247
Marie, J. C., s129
Markwick, A. J., 267
Marshall, I., 231
Martel, J.-C., 27, 55
Martin, J.-L., s175
Martin, J.-M., s137
Martinez, J., s253, s257
Marvaldi, J., s137
Matwyshyn, G. A., 21
Meeley, M. P., 97
Meisenberg, G., 557
Melis, M. R., 591
Merchant, K., 983
Mercier, F., s249
Meyerhoff, J. L., 1153
Meyerson, L. R., 481
Miedel, M., 689
Miles, C. M. M., 791
Millar, R. P., 827, 1101
Miller, L. H., 201
Miller, R. L., 865
Mills, S., 977
Misra, H. P., s225
Molinero, P., 177
Moody, T. W., 283, 815, 835
Morales, O., 91
Morel, G., 1197
Morgantini, D. S., s229, 357
Morice, A. H., s279
Morley, J. E., 729, 969, 1079
Moroder, L., s155
Morreale, R. A., 735
Morrell, J. I., 899
Morrison, J. F. B., s205
Mougey, E. H., 1153
Moyse, E., 351
Müller, E. E., 1011
Muller, J.-M., s137
Murphy, W. A., s49, s69
Murthy, K. K., 241
Murthy, S. N. S., s229, 357
Mutt, V., s75

Nagornaya, L. V., 551
Nakamaru, M., 373
Naranjo, J. R., 39, 419
Naruse, K., 141
Naruse, M., 141
Naruse, S., s237
Negro-Vilar, A., 749
Nemer, M., 1147
Netchitailo, P., 573
Netti, C., 315
Neubert, K., 195
Nezelof, C., s249
Nguyen, H. Q., 437
Nguyen, K. Q., 337
Niel, H., s253
Nilaver, G., 111
Noe, B. D., 147, 331
Nokihara, K., s83
Nunan, L., 323
Nurnberger, J. I., Jr., 455

Obana, K., 141
O'Donohue, T. L., 341, 437, 815, 835, 865, 1109
Okamoto, H., s83
Oku, R., 631
Okuya, S., s193
Oleshansky, M. A., 1153
Oliver, C., 393
Olson, G. A., 907
Olson, R. D., 907
Ong, H., 989
Ossenkopp, K.-P., 449
Otaka, A., 631
Ott, C., 91
Ottesen, B., s181, s201
Ottlecz, A., 51
Ozaki, T., s237

Pabst, M. A., 761
Pan, Y.-C. E., 689
Pang, P. K. T., 1131
Pasquini, F., 351
Paul, S., s147, s151
Pecile, A., 315
Pedersen, J. H., 15, 717
Pelletier, G., 45, 573, 941, 1197
Perseo, G., 755
Peters, A., 297
Peyre, G., 393
Pfaff, D. W., 473, 899
Pichon, J., s137
Piekut, D. T., 891
Pilcher, W. H., 783
Pittius, C. W., 253

---

Numbers preceded by the letter "s" indicate items appearing in *VIP and Related Substances . . .* Suppl., Vol. 7, 1986.

Plunkett, L. M., 679
Poggioli, R., 843
Polak, J. M., 5, s205
Pontet, M., 961
Porte, D., Jr., 61, 771
Portha, B., s75
Powell, R. C., 1101
Pradayrol, L., s261
Prieto, J. C., s273, 741
Przewłocka, B., 711
Przewłocki, R., 711

Quirion, R., 55, 351, 855, 865

Raible, L. H., 581
Raufman, J.-P., s17
Recant, L., 1061
Redaelli, M., 1011
Reeve, J. R., Jr., 723
Reid, I. A., 91
Reinecke, M., 297
Reis, D. J., 97
Revel, L., 1159
Reyl-Desmars, F., s165
Ribet, A., s261, s267, 953
Rioux, F., 27, 431, 1087
Ritter, R. C., 587
Rivier, J., 127, 953
Robberecht, P., s53, s79, s101 s109, s237, 645
Roca, B., 741
Rogers, R. C., 695
Romeo, D., 961
Rosselin, G., s75, s89, s121, s129, s155
Rossi, A. C., 755
Rougeot, C., 393
Rousseau-Merck, M. F., s249
Rovati, L. A., 1159
Rovati, L. C., 1159
Roze, C., s245
Rudehill, A., 821
Ruellan, C., s267

Saavedra, J. M., 679, 873
Said, S. I., s147, s151, s225
Sakurai, H., 141
Sallanon, M., 801
Salvadori, S., 247
Samson, W. K., 51
Sánchez-Blázquez, P., 623
Sander, G. E., 259
Sandow, J., s61
Sandric, S., s265
Santarelli, P., s265
Sassolas, G., s281
Sata, T., s225
Satoh, M., 631
Saunders, W. S., 597
Scalia, S., 247
Scemama, J. L., s267
Schachter, M., 791
Schally, A. V., 11
Schepp, W., 885
Schiffrin, E. L., 241
Schmid, R., 127
Schneider, J., 885
Schneider, L. H., 135
Schoenenberger, G. A., 1001
Schönenberg, P., s175
Schusdziarra, M., 127
Schusdziarra, V., 127, 885
Schwanzel-Fukuda, M., 899
Schwartz, J., 91
Schwartz, J.-C., 669
Seal, U. S., 969
Sebben, M., s187
Setnikar, I., 1159
Sever, P. S., s279, 791
Shaffer, M. M., 283
Shani, Y., s1
Shewey, L. M., 701
Shigematsu, K., 679, 873
Shimomura, H., 491
Shizume, K., 141
Shults, C. W., 1109
Sibilia, V., 315
Sills, M. A., 337, 1029
Simmons, W. H., 557
Singer, E. A., 297
Skalli, S., s261
Skofitsch, G., 609, 1029
Smith, G. P., 135
Smith, H. A., 383
Sobel, D. O., 443
Solini, A., s287
Sollevi, A., 821
Song, D. L., 33
Speth, R. C., 1021
Spruijt, B. M., 1
Stangier, J., 67
Stanley, B. G., 1189
Stanworth, D. R., 171
Staun-Olsen, P., s181
Stein, L. J., 61
Stewart, J. M., 1121
St-Pierre, S., 27, 55, 431, 1087
Stuenkel, E. L., 397
Su, H. C., s205
Suen, M. Z., 33
Susini, C., 953
Suzuki, N., 491
Svoboda, M., s7, s101
Szabó, G., 539
Szücs, M., 195

Taborsky, G. J., Jr., 771
Takagi, H., 631
Takayanagi, R., 373
Takeda, Y., s83
Tamir, H., 995
Tan, D.-P., 569
Tandeski, T., 969
Tang, J., 33
Tanizawa, Y., s193
Tatemoto, K., 1043
Telegdy, G., 11, 539
Terenghi, G., s205
Theodorsson-Norheim, E., 297
Thibault, G., 241, 1147
Thorndyke, M. C., s21
Thornhill, J. A., 597
Timmers, K. I., 1061
Tirard, A., s137
Titov, M. I., 551
Toh, B. H., 267
Tomatis, R., 247
Tonnaer, J. A. D. M., 425
Tonon, M.-C., 163, 393
Track, N. S., s83, 1193
Trouillas, J., s281
Truesdell, L. S. 111
Tseng, L.-F., 369
Tsou, K., 569
Tsuchiya, M., s193
Turnbull, B. A., 201
Turner, J. D., 225
Turner, J. T., 849
Tyler, A. N., 119

Uccioli, L., s265, s287
Udelsman, R., 465
Uttenthal, L. O., 383
Uvnäs Moberg, K., s221

Vale, W., 127
Valentino, K. L., 1043
Vandermeers, A., s79, s101
Vandermeers, Piret, M. C., s79, s101
Van Dongen, P. A. M., 297
Van Ree, J. M., 563
van Vugt, M., 425
Vatter, A., 1121
Vauclin, N., s155
Vaudry, H., 163, 393, 573, 941
Vavrek, R. J., 1121
Vaysse, N., 953
Vécsei, L., 11
Verburg-Van Kemenade, L., 163
Vergoni, A. V., 843
Viguerie, N., 953
Villa, I., 315
Vincent, J.-P., 1071
Virmani, M. A., 225
Voigt, K. H., 189
Voyles, N. R., 1061

Waelbroeck, N., s53, S101, s109
Wager-Srdar, S. A., 729
Walczak, D. D., 1153
Walker, P., 45
Wamsley, J. K., 1021
Watson, R. E., Jr., 155
Weber, M. A., 977
Wędzony, K., 711
Wei, Q., 973
Weiss, S., s187
Wiegand, S. J., 155
Wilchek, M., 995
Williams, D. W., Jr., 1095
Williams, J. A., 293
Wilson, I. B., 407
Winand, J., s101
Wire, W., 323
Wissmann, H., s61
Wolter, H. J., 389
Wong, K.-L., 79
Wood, J. G., 147
Woods, S. C., 61, 771
Wunsch, E., s155, 953

Xie, C. W., 33
Xu, C., 973

Yajima, H., 631
Yalow, R. S., s17, 689
Yanaihara, C., s7, s79, s83, s237
Yanaihara, N., s7, s79, s83, s193, s237
Yang, C. L., 973
Yang, M. C. M., 1131
Yarygin, K. N., 551
Yasui, A., s237
Yates, M. E., 637
Yau, W. M., 289
Yiangou, Y., s205
Yoburn, B. C., 995
Young, E. A., 603
Youther, M. L., 289
Yulis, C. R., 79

Zadina, J. E., 497
Zalenski, C., 1061
Zamboni, A., 315
Zeggari, M., 953
Zeytin, F., s165
Zubiaur, M., 237
Zysk, J. R., 935

Numbers preceded by the letter "s" indicate items appearing in *VIP and Related Substances . . .* Suppl., Vol. 7, 1986.